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The purpose of this study was to explore women inter-collegiate athletes' expectations for the leadership to which they are exposed in competitive sports. A further purpose of the study was to determine the relative value athletes place on four aspects of coaching style: general mannerisms, personality traits, philosophical commitments, and technical knowledges/competencies.

Subjects participating in the study were women inter-collegiate athletes representing colleges and universities in the state of North Carolina. A 60-item Q-sort was administered to 120 athletes. The subjects ranked the items along a continuum of appropriateness from "most valued" to "least valued."

Analysis of data involved the following statistical procedures: (1) computation of mean scores for each of the 60 statements and ranking of the statements, (2) computation of mean scores for each of the four dimensions of coaching style, (3) analysis of variance to determine if significant differences existed between the four dimensions of coaching, and (4) the Newman-Keuls statistical technique to determine where the significant differences existed.

Two statements from the dimension "philosophical commitments" were ranked highest by the athletes: "Consider each athlete as an individual," and "instill within her players the belief that winning is great but playing and loving the game is greater." Among the 10 highest ranked statements were four from "technical knowledges/competencies," three statements which represented "personality traits," two from "philosophical commitments," and one statement which purportedly referred to "general mannerisms."

The lowest ranked statement, "View winning as everything," was from the dimension "philosophical commitments." Seven other statements least valued by the athletes were representative of the dimension "general mannerisms." The meanings of these items related to appearance, language, habits and other observable behaviors.

Female collegiate athletes value aspects of coaching referred to as "technical knowledges/competencies" most. The grouping of statements designating "personality traits" ranked second. The "philosophical commitments" dimension was ranked third and the final 15 statements, those pertaining to "general mannerisms" dimension, were ranked fourth. Newman-Keuls statistical procedure revealed significant differences between "general mannerisms" and "technical knowledges/competencies"; between "general mannerisms" and "personality traits"; and between "general mannerisms" and "philosophical commitments."

EXPECTATIONS OF WOMEN COLLEGIATE ATHLETES  
REGARDING COACHING STYLE

by

Peggy E. Martin

A Thesis Submitted to  
the Faculty of the Graduate School at  
The University of North Carolina at Greensboro  
in Partial Fulfillment  
of the Requirements for the Degree  
Master of Science in Physical Education

Greensboro  
1974

Approved by

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APPROVAL PAGE

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Date of Examination

## ACKNOWLEDGEMENTS

To the women athletes who participated in the sorting, the writer expresses her thanks.

To the seven "judges," who gave of their time and knowledge, the writer expresses her appreciation.

To Dr. Gail Hennis, for sharing her knowledge and her library, the writer expresses her sincere appreciation.

To Pat Hielscher for her typing ability, her encouragement and her friendship, the writer is deeply indebted.

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## CHAPTER I

### INTRODUCTION

Sport is generally accepted as an integral part of the American culture. The changing role of women in society, a present-day trend, is clearly observable in a variety of sport-related contexts. Opportunities for female participation in a variety of activities are increasing. Higher levels of skill are being developed by women athletes. Organized competitive experiences are being fostered for sportswomen within schools and colleges as well as in the professional ranks.

Like many other elements of American society, sport was once considered to be strictly for males. Though female sport participation has a long history, the extent of involvement has been much less than that of males (Gerber, 1974). Strictly defined sex roles within American society acted to block the sport aspirations of many women involved. Traits associated with success in athletics were regarded as desirable masculine attributes. Until relatively recently women interested in sport were thought to be unfeminine (Harris, 1973).

But as the role of woman in society changed so did the role of woman in sport. The feminist movement opened the door for many women to aspire to the goals that once resided in "masculine territory." As a result of the new societal thrust, female stereotypes of the last decades changed. Differences

between the sexes have been somewhat de-emphasized. Furthermore, numerous factors influencing the involvement of women in sport have also been modified. For example, misconceptions about the physical capabilities and effects of athletic participation on women have been rectified.

One of the most marked changes pertains to the legal status of women and of women in sport. Guidelines for Title IX of the Education Amendments of 1972 have been posted in the Federal Registry. This legislation insists upon equality of the sexes. Title IX requires equitable funds, facilities, salaries, travel, and per diem allowances, to identify a few of its concerns for women who choose to pursue sport experiences sponsored by educational institutions. Because of this insistence upon equality, sportswomen are entering an era that will be full of new competitive opportunities in athletics.

The "new" American sportswoman is emerging. National championships are conducted in seven intercollegiate sports; these programs are showing continuous growth. The need for more knowledge concerning women in sport is great. High caliber competition now developing in women's athletics which will, hopefully, continue to evolve, requires qualified teachers and leaders. There is, for example, a great need for capable coaches. The woman coach of the '70's must have numerous competencies: analysis and communication of skill intricacies, in depth knowledge of her sport, ability to devise and apply strategies, the conduct of personal relations, to cite but a few. The coach must know how to best deal with her athletes to bring about a successful sport situation.



The present study sought to obtain information that relates to coach-player interactions. It investigated the expectations of women intercollegiate athletes regarding coaching style. Singer (1972) pointed out that "the athlete's evaluation of the coach, and the resulting degree to which he accepts the coach, will effect the way he learns and remembers skills and strategies (p. 365)." It follows, therefore, that it is important that the coach be aware of what her athletes anticipate of her and the extent to which these expectations are valued.

#### Statement of the Problem

The purpose of this study is to explore women collegiate athletes' expectations for the leadership to which they are exposed in competitive sports. A further purpose of the study is to determine the relative value sportswomen place on various aspects of coaching style: general mannerisms, personality traits, philosophical commitments, and technical knowledges/competencies.

More specifically, answers are sought to the following questions:

1. What are the most valued expectations athletes have in regard to the coaching they experience?
2. What are the least valued expectations athletes have in regard to the coaching they experience?
3. What differences, if any, are there among athletes' values of four dimensions of coaching: general

mannerisms, personality traits, philosophical commitments, and technical knowledges/competencies?

#### Definition of Terms

Five terms specifically relating to this study were defined in the following way:

1. AIAW - Association for Intercollegiate Athletics for Women; governing body for women's intercollegiate athletics; linked with the National Association for Girl's and Women's Sport of AAHPER.
2. Expectation - according to Webster, is a looking forward to; anticipation. Also, it is a looking for as due, proper or necessary (Webster, 1964).
3. DGWS - Division of Girl's and Women's Sport of AAHPER reorganized and presently termed National Association for Girl's and Women's Sport (NAGWS); governing body for all girl's and women's sports including production of rules, guidelines, etc.
4. Intercollegiate Participant - a woman athlete who has competed in a given sport at the varsity level representing her college or university against other colleges and universities during the 1973-74 academic year.
5. Q-sort Technique - the sorting of a number of statements or phrases of self reference along a continuum of appropriateness of accuracy of description ranging from those that are "most like" or "most valued" to

those that are "least like" or "least valued" by the sorter.

The following operational definitions of four arbitrarily named dimensions of coaching behavior were specified for use in this study:

1. General Mannerisms - refer to habits and other overt behaviors perceptible in a variety of coaching situations. Less stable more reactive dispositions were considered to be somewhat distinctive characteristics.
2. Personality Traits - refer to the relatively permanent and broad behavioral reaction tendencies which represent behavior and generalized feelings or responses (Singer, 1972). They refer to more or less deep-seated attributes of an individual.
3. Philosophical Commitments - refer to the underlying beliefs and principles which guide the coach in structuring the athletic environment and in interacting with players.
4. Technical Knowledges/Competencies - refer to those dimensions of coaching which consist of the coach's understanding of rules, strategies, plays, etc., of the game and the way in which these are implemented.

#### Assumptions Underlying the Research

There were four assumptions upon which the study was based. First, it was assumed that athletes do, in fact, have expectations regarding coaching behavior. Secondly, it was postulated that

expectations can be measured by use of Q-technique. In the third place, general mannerisms, personality traits, philosophical commitments and technical knowledges/competencies were accepted as legitimate dimensions of coaching style. Finally, it was assumed that athletes' responses were honestly given.

#### Scope of the Study

The investigation was limited to women intercollegiate participants at selected institutions of higher education in the state of North Carolina. Thirteen institutions were arbitrarily asked to participate in the study. Six responded favorably. Athletes involved in the study, then, were affiliated with the following colleges and universities: Campbell College, Catawba College, Elon College, High Point College, Peace College and The University of North Carolina at Greensboro.

These colleges and universities were invited to take part in the research because their participation in NCAIAW state championships and/or AIAW regional or national championships in basketball, golf, tennis, swimming, and volleyball gave the investigator cause to consider the level (quality) of play to be highest within this geographic area.

One hundred and twenty athletes involved in seven major sports acted as subjects for the investigation. Due to multiple team membership by many of the subjects, the data were not analyzed according to sport. This study, then, involved the female intercollegiate athlete in general.

The specific findings of the research were also limited by the selected mode of measurement of athletes' expectations. The structured Q-sort statements, per se, were derived from the experiences and orientations of the investigator.

#### Significance of the Study

Intense competition for women intercollegiate athletes is a relatively new phenomenon. The success of athletic teams is dependent upon many variables. With increased attention directed toward competition for women, research concerned with the identification of such variables has taken on new interest. Investigations have been reported which focus on physical traits, personality traits, and attitudes of women athletes. There is, however, considerable need for still more knowledge about women's sport behavior.

Most of the reported investigations were concerned with the athlete herself. Little study, if any, has been undertaken concerning the woman coach. Ziegler (1972) concluded her work with the statement that much more research was necessary to even begin to understand the problems that face players and coaches.

It can be logically assumed that the behavior of the coach and the athletes' perception of that behavior plays a critical role in the interaction between coach and athlete. One might even regard this as one of the most important elements in the intercollegiate sport experience. Yet adequate research has not been reported on this specific subject. Ziegler (1972) investigated

players' perception of the coach as well as the coach's perception of the players. She stated that it is most important for the coach to know how her players perceive her.

The investigator was and continues to be totally committed to the point of view expressed above by Ziegler. Furthermore, to be influential in elevating the quality of the sport experience, it seems necessary for the coach to be aware of player expectations of her conduct and leadership performance. The present investigation is considered to be capable of contributing to the general knowledge about collegiate women athletes' expectations of their coaches. It is hoped that the results will serve as a basis for further investigations of the topic that will lead to greater understanding of the woman coach.



## CHAPTER II

### REVIEW OF RELATED LITERATURE

Background for studying the expectations of women athletes for coaching behavior was provided by review of related literature. In attempting to ascertain the status quo about our knowledge of the subject, literature concerning the changing role of women in sport was studied. Included were selected writings about the twentieth century American sportswoman, physiological misconceptions about women and their sport participation, the feminine image in sports, and current trends in intercollegiate competition for women. Characteristics of coaches and studies related to coaching were considered to be particularly important to the formulation of Q-statements. Also, the study of Q instrumentation itself, was undertaken in order to increase the researcher's competency in utilizing this tool in the present study.

#### Changing Role of Women in Sport

Obviously, many factors affected the role of sportswomen. The following review attempted to identify those ideas and effects which, in the writer's opinion, were directly related to the present-day emergence of the "new woman athlete."

When reading the very early and ancient history of sport, it is difficult to find documentation of the existence of the



female sex. Boslooper and Hayes (1974) wrote that most readings in history focus on the female body as it is ". . . clothed, admired, impregnated, confined, and buried (p. 115)." The pittance that was written ignores physical activity and emphasizes the female's cultural and domestic roles. The authors contended that books were written ". . . by, for, and about men. . . (Boslooper and Hayes, 1974, p. 116)" in sport but there are no histories of women in sport. The most to be found on the athletic endeavors of women in the past is an occasional chapter in a physical education text, ". . . which presumably are read by only physical education majors (Boslooper and Hayes, 1974, p. 116)."

However, it is not quite as difficult to locate histories of the American sportswoman. With the recent increase in athletic competition for women, physical educators, sport psychologists, and others interested in the current women's sport movement attempted to compile histories of female sport participation (Coffey, 1965; Holbrook, 1972; Gerber, 1971, 1973a, 1973b, 1973c, 1974; Gerber, Felshin, Berlin, & Wyrick, 1974; Spears, 1974; Swanson, 1974). Works by the above authors and chapters in physical education texts were utilized to provide background for understanding the emergence of the American sportswoman.

#### An Overview of the American Sportswoman in the Twentieth Century

Several writers contended that the American sportswoman is a twentieth century phenomenon (Ulrich, 1960; Coffey, 1965;

Klafs and Lyon, 1973; Miller, 1974). The first recognition by a professional group given to women's sport in the United States was in 1899 at the Conference on Physical Training. A committee was appointed to study the many versions of rules of the game of basketball as it was being played by girls (Ulrich, 1960). This committee led to study groups which investigated other sports. In 1917, the American Physical Education Association appointed a Committee on Women's Athletics (Ulrich, 1960).

Coffey (1965) suggested that the image of the sportswoman was directly related to the changing role of women in this century. She felt that the emergence of women in sport closely paralleled the history of the American culture. Coffey (1965) divided the development of the sportswoman into four eras according to the developments in American culture: Idealization (1890-1919), Emancipation (1920-1929), Socialization (1930-1943), and Participation (1944-1965).

The ideal woman at the turn of the century, in Coffey's (1965) period of "idealization," was portrayed as the matron: her role was child bearer, child rearer, housekeeper and cook. "In 1900 a woman's future consisted of growing up, marrying, and becoming a mother (Coffey, 1965, p. 38)." Teaching was the only profession to which the early twentieth century woman had access. Womanly virtues were to be gentle, modest, shy, fragile, and subordinate to the opposite sex. However, women themselves became interested in other facets of life including vigorous activities. Holbrook (1972), cited the automobile in the early 1900's as

helping set the pace for women's sport because it increased women's mobility.

Tennis was played by women and golf was acceptable but facilities were scarce. Coffey (1965) suggested that during the first quarter of the century tennis was for the energetic, young lady but ". . . golf curbed a woman's impetuosity, for she stood still, walked slowly and was deliberate in action (p. 38)."

In 1901, field hockey was demonstrated by Applebee across the country (Spears, 1974). Spears wrote that in the first decade of the twentieth century sport was accepted as an integral part of college programs for women and by 1910 in over half the departments of physical education, the central focus of the physical education curriculum was sport.

Klafs and Lyon (1973) and Coffey (1965) reported that in the ten years prior to World War I, interscholastic basketball dominated as the major team event for women. Klafs and Lyon (1973) quoted Rice et al. that 22% of the colleges in 1920 had some form of intercollegiate competition for women.

While the "Emancipation" (1920-1929) years allowed additional freedom, woman's role did not change in the public eye (Coffey, 1965). However, the young woman of the twenties awakened to a new world. She danced the Charleston, the Turkey Trot, and the Kangaroo Kick, leading her own rebellion against formality. There was an increased desire on the part of women to participate in sports. The young sportswoman was aided in the fulfillment of her desire by legislation that was passed requiring that physical

education be taught in the public schools. "By 1930, girls were participating in a great variety of sports (Coffey, 1965, p. 39)." The variety of opportunities, however, was mainly of the intra-mural and playday types because of a gradual rising tide of opposition to interscholastic and intercollegiate sport competition for girls and women. This was evidenced by the drop of percentage of colleges participating in some form of intercollegiate women's competition from 22% in 1920 to 12% in 1930 (Klafs and Lyon, 1973).

Gerber (1973b) summarized studies undertaken in 1923 (Lee, 1924), 1930 (Lee, 1931), and 1936 (Leavitt and Duncan, 1937) which assessed the nature and extent of intercollegiate competition for women. She pointed out that although these studies represented only a sample of the total population, insights into the extent of intercollegiate competition for women can be derived from them. A summary of Gerber's findings follow:

1. Varsity type intercollegiate competition in the periods surveyed were never very extensive.
2. Interclass-intercollegiate competition also was not practiced extensively prior to 1923 and dwindled almost to nothing by 1930.
3. The telegraphic form of intercollegiate competition, on the other hand, experienced a steady gain in popularity during the period surveyed.
4. By 1930 a new form of intercollegiate competition--the playday--had been developed.
5. In the 1930's another new form--the sportsday--became

the chief form of intercollegiate competition which actually took place on a face-to-face basis.

6. Although a hard core of colleges continued to compete on the varsity level (5 of the original 6 schools from the 1923 sample), the general concept of intercollegiate competition was rejected by the women during the twenties (Gerber, 1973b, p. 3-4).

Although the reasons for the curtailment of interscholastic and intercollegiate sport programs for women during a time of great social freedom have not been adequately researched, Gerber (1973c) proposed some enlightening hypotheses. Basically, she felt that the minimizing of competition was in accord with philosophies of education of that time period, and reflect the notions of appropriate social behavior. Medical conjectures about the physical capacities of women appeared to be another factor involved in the formulation of the policy. Finally, the desire of sport leaders to separate women's programs from practices associated with men's athletics was a major instigator of the virtual elimination of girls' and women's interscholastic and intercollegiate sport competition.

In other words, the policy of minimizing competitive programs for girls and women was most probably based on beliefs or opinions of the professional leaders, rather than upon the wishes of the potential participants or on any valid evidence that competitive sport was either good or harmful to girls and women (Gerber, 1973c, p. 4).

Even with the decline in institutionalized competition, Gerber termed 1925-1935 as ". . . truly a golden decade for women



in sport (Gerber, 1973c, p. 2)." She asserted that sport for women had arrived because women took up numerous sports in addition to the more traditional ones: surfing, sailboat racing, speed-boating, aviation, curling, polo, fencing, squash, skiing, bobsleding, figure skating, speed skating, dogsled racing, and even jai alai (Gerber, 1973c, p. 2).

From the era of prosperity, where did sport for women go? Coffey (1965) cited the years of 1930-1943 as the "Socialization" period in which women became more of a helpmate to the male. This was due partly to the depression. Gerber (1973b) offered explanations historians gave for the decline of emancipation and women in sport. The disappointment caused by failure of suffrage to affect real change, the continued second class status of women, and strong pressures to withdraw to the old morality were cited as important factors. The policies eliminating interscholastic and intercollegiate competition endured for roughly forty years. The decision lasted because it held true to the concept of femininity and the social roles expected of females in America and "... in part because there was no research to contradict it (Gerber, 1973c, p. 5)."

A 1937 article in the Journal of Health, Physical Education and Recreation by Sefton asked "Must Women in Sport Look Beautiful?" The author suggested that much was written in that day about roles women should take in modern sports. Sefton cited one popular male critic of the day as approving a list of nine sports in which women might engage, because in his estimation, they appeared beautiful. She carried his opinion further:

It is alright for a girl to go swimming, provided she does not spoil the picture by wearing a bathing cap, and provided she sticks to the recumbent position in the backstroke. She might go in for archery, shooting, flying, and perhaps speed and figure skating. A lady might with impunity go angling. With proper attention to the esthetic effect, she could ride horseback. Skiing would be placed on the list with the proviso that the sportswoman would promise to make happy landings, and not get involved in an accident of any sort; and if she did fall, she must be sure to fall in a graceful and dignified position (Sefton, 1937, p. 481).

Sefton challenged this limited list of activities as girls ". . . would lose one of the greatest assets of modern sports, the opportunity to lay aside self-consciousness and plunge wholeheartedly into games for the fun and satisfaction and joy of them (Sefton, 1937, p. 510)." She added, however, that although girls are born with the same desire for physical activity as boys, they differ in their physiological make-up which limits the degree to which girls should engage. She warned, that in planning a program of sports for women, if they try to imitate men and use men's rules in their games, ". . . they are likely to become unfeminine and awkward (Sefton, 1937, p. 510)."

Coffey (1965) titled the era of 1944-1965 "Participation." She contended that her ". . . fortitude in time of war. . . (Coffey, 1965, p. 41)" carried the woman of the 40's into a world of equal responsibility with men. Klafs and Lyon (1973) asserted that a greater emancipation for women and a changing social pattern in the aftermath of World War II allowed reversal of the trend of the 30's toward elimination of women's athletics.

In 1941 Atwell offered predictions about women's sports that could be made concerning the World War then at hand and also



meeting new world demands. Her predictions dealt mainly with the healthful outcomes of sport. Atwell anticipated that school administrations would tend to look upon sport more favorably because of the contribution to health and morale. Competition was predicted as being most important due to the need for development of everyone's "will to win."

Intramurals in the 40's led the way for sportsdays and women enjoyed playing against other schools (Coffey, 1965). From these sportsdays evolved extramural programs for the more ardent sportswoman. In 1965 Coffey related:

Today, the young sportswoman is no longer a rarity. Benefiting from the past six decades of both economic and social growth, she competes with other women who have had similar advantages. Her opportunities are unlimited. She is completely free to choose the extent of her participation in physical activity (Coffey, 1965, p. 50).

Coffey then challenged the leaders of the day as to the importance of their decisions and the far-reaching effects they will have on the sportswoman of tomorrow.

#### Physiological Misconceptions

The Committee on Women's Athletics formed in 1917 was committed to the philosophy of both avoiding the pitfalls of men's athletics and ". . . keeping the game safe and feminine for the girls (Ulrich, 1969, p. 509)." Protecting women from any type of physical or emotional strain during the menstrual cycle was a major concern (Ulrich, 1960).

Lee's (1931) study of 1923 followed up in 1930 concerning the case "for" and "against" intercollegiate competition for women

provided lists of advantages and disadvantages. The disadvantages are vital to the history of women and sport in that Lee came up with a phrase that was later cited by many physical educators again and again: "They would be apt to get more physical straining than physical training. . . (Lee, 1931, p. 96)." Another effect considered to be harmful by Lee was concerned with activity during the menstrual cycle:

There would be ever present the tendency to take an active part in athletics during the menstrual period for the sake of the trip and the honor of having played. Also the members of a team who can be the least spared by their team would be urged to keep secret their condition so the team would suffer no handicap through their absence. The desire to play the best players being so much more intense in intercollegiate games than it would ever be in a series of interclass or intramural games (Lee, 1931, p. 96).

Many medical professionals of the time spoke of the dangers to the menstrual cycle but there were other medical authorities who differed with this view. Women who realized the differences of opinion, however, opted to be safe rather than sorry (Gerber, 1973c). We now know much more about this issue.

Harris (1973) reported that a variety of research done over the years ". . . has produced no evidence that strenuous physical activity has any deleterious effects upon menstruation, fertility, or childbirth (Harris, 1973, p. 196)." Women have set world records during all stages of the menstrual cycle and some pregnant athletes have competed in the Olympic Games without any ill effects (Harris, 1973).

Klafs and Lyon (1973) support Harris' point of view. They reported a study involving 111 women track and field athletes;

". . . 55% showed no performance decrement during the menses, while the remainder showed some decrease in performance (Klaafs and Lyon, 1973, p. 53)."

Thomas (1971) cited Erdelyi's study of 729 Hungarian women athletes, and reported that

. . . menarche, menstruation, and subsequent obstetrical history were not adversely affected by vigorous physical activity. Indeed, the length of labor was shorter and the necessity for Caesarean section in athletes was 50% less than the control group (Thomas, 1971, p. 38).

Thomas also quoted research in which exercise was shown to benefit those with dysmenorrhea.

There had been much concern that the reproductive organs themselves could be permanently damaged in certain sports which involve falls, collisions, and violent contacts (Gerber, 1973c). Thomas (1971) quoted Paramore who had experimented extensively along this line. Paramore suggested that because the uterus is surrounded by structures of the same specific gravity and, furthermore, because it normally has no air spaces around it, it is much like a raw egg in a jar filled to the top with water. "No degree of violent handling that does not smash the jar will injure the egg (Thomas, 1971, p. 39)."

In what Thomas terms an emancipated view, he stated ". . . that apart from menstruation, parturition and lactation, there are no essential differences in the physiology of male and female, and the special anatomical characteristics of the female offer no bar to athletics (Thomas, 1971, p. 37)." Harris argues that though

". . . the sexes differ in structure, the difference in physiological functioning during exercise are minimal (Harris, 1973, p. 194)."

Many other physiological factors have been cited as limiting to the female's sport participation but research has not validated these stands. Vital capacity, i.e., volume of air moved through the lungs from a maximal inspiration to a maximal expiration, of females is thought to be about 10% less than that of a comparable male. However, this large vital capacity is not an indication of athletic ability nor a prognostication of physical capacity according to Klafs and Lyons (1973). "Rather, it is the effectiveness and the efficiency with which the vital capacity is used that determines these qualities (Klafs & Lyon, 1973, p. 40)."

Harris contended (1974) that probably the greatest misconception stemmed from the exercise physiology literature which claims that aerobic work capacity of the female is only 70-75% that of the male. She cites work done at Penn State and also by Astrand which found that the average maximal oxygen uptake is approximately the same for both sexes. There are some slight disagreements on this issue among experts.

Probably the misconception that was the greatest deterrent to women's sport participation was the fear of becoming heavily muscled and masculine-looking. However, there is no evidence to support this effect from athletic participation. "The hormones that make a male a male and a female a female are the hormones responsible for determining the degree of muscle mass (Harris, 1973, p. 196)."

In summary, then, the writer proposes that misconceptions about the physiological functioning of the female who partakes in vigorous activity resulted from hearsay, bias and old wives tales. This was, of course, perpetuated for many years by a lack of research and data about the female in sport and physical activity. Hopefully, this is changing.

### The Feminine Image in Sport

The concept of "the ideal woman" has been in direct opposition to the active women in sport throughout history. The history of women in sport shows evidence of very little vigorous sport activity for women until the late 19th century. At the turn of the century, woman's role was basically that of child-bearer, mother, house-keeper, and cook (Coffey, 1965; Sherriff, 1971). As the years passed, women became more self-reliant and independent. By mid-century, besides raising a family, the concept of women acknowledged that she worked, joined clubs, and was more active in her community. Sports also emerged as an important part of American life. It would seem that with women's new found independence in general, the sports-woman as a specific type of person should emerge (Sherriff, 1971).

Cultural barriers formed to deter women's fulfillment in sport. Even today, when a girl chooses to become involved in sport, she chooses an atypical mode of behavior in American society. ". . . many people feel the serious female athlete can not be very feminine (Harris, 1973, p. 192)." Society was concerned with the notion of a loss of femininity since the beginnings of women's sport



in America. Keeping games "safe" and "feminine" for participants dominated the thinking of the first committees on women's sports formed in 1917 (Ulrich, 1960).

What is being "feminine?" It seems that the answer to this question lies within the culture of societies. Gerber provides one definition of femininity. "To be feminine, then, is to behave in accordance with the prevailing social concept of femininity (Gerber, 1974, p. 5)."

In American society, involvement in sport is not considered to be feminine. Games emphasizing physical skill are usually associated with achievement and aggression which are interpreted as culturally masculine traits. The young girl is often told by her parents at an early age that games are not ladylike (Hart, 1972). For most females, avoiding the risk of being stereotyped as the "girl jock" or "Amazon" is the easiest route to follow. "Conforming to the socially acceptable feminine image is a much 'safer' practice (Harris, 1973, p. 193)."

The main criticism of sports for women, then, is that ". . . sports participation tends to masculinize the behavior of girls (Harris, 1973, p. 194)." But, Harris and others point out that there is no evidence of this. "The traits necessary for high-level participation often correspond to the traits that are admirable to the male (Harris, 1971, p. 1)."

Buhrer (1973) reviewed literature about sex role stereotyping. She cited Kitay's study which demonstrated that women follow the sex role beliefs established by men (Buhrer, 1973, p. 14).

Boverman et al., also cited by Buhner (1973), found that women are forced to fulfill a role that is less favorable and less healthy than that of their male counterpart.

Steinman, Levi, and Fox (1964) utilized the Inventory of Female Values to investigate college women's perceptions of sex role stereotypes. Differences were found to exist between "the ideal self" and the perceived "man's ideal woman." The "man's ideal woman" concept was considered to be traditional and passive while "the ideal self" was considered to be active and assertive. In summarizing the literature, Buhner wrote:

Thus, the literature strongly supports the existence of sex role stereotypes. Although women appear to desire a more modern 'ideal self' they still feel that the men want them passive and in the home, i.e., traditional (Buhner, 1973, p. 20).

In a study by Berlin (1973), the perceptions of "the ideal woman" and "the woman athlete" as held by college men and women athletes and non-athletes were investigated. Perceptions were determined by The Activity Vector Analysis. Both concepts were perceived differently by all four groups. "The ideal woman" was ". . . highly sociable, smooth, glib, and friendly (Berlin, 1973, p. 3)." Men athletes perceived "the ideal woman" much like the Perfect Person of the Activity Vector Analysis. "The woman athlete" was perceived to be ". . . positive, self-initiating, outgoing. . . aggressive tendencies, social confidences, restless (Berlin, 1973, p. 3)." The perceptions of the men athletes produced a low positive relationship between concepts of "the ideal woman" and "the woman athlete." "The ideal woman" had a higher activity score than "the woman athlete."



"Personality tests have shown that women athletes, in general, are more toughminded, independent, serious, conscientious, aggressive, perserving, and inhibited than the general female population (Gerber, 1973c, p. 11)." Gerber was not surprised to find the difference, ". . . for to be an athlete is to be the antithesis of the stereotype (Gerber, 1974, p. 8)."

In the last decade there has been a trend toward de-emphasizing differences between the sexes (Gerber, 1974). The image of the ideal woman is changing.

In part, this has happened because generations of active sportswomen have proved that there is a great discrepancy between the stereotyped image of women and the reality of womanhood. They have demonstrated that women are strong and capable of great physical prowess. They have demonstrated that high level competition is not harmful to them psychologically. They have proved that sport participation does not affect their ability to reproduce their species. They have behaved aggressively and competitively on the courts and are still lovable enough to attract boyfriends, lovers, and husbands (Gerber, 1974, p. 8).

This is the decade then, for women to act as LeVeau (1973) suggested: ". . . to take sport participation for its true value, and be less concerned about being 'masculine' (p. 3)."

#### Current Trends in Intercollegiate Competition for Women

The Division of Girl's and Women's Sport (DGWS) of the American Association for Health, Physical Education, and Recreation sponsored a study conference that focused on competition for girls and women in 1965. Guidelines for interscholastic and intercollegiate competition for women were formulated (Scott, P. M., 1966). In 1967, DGWS established the Commission of

Intercollegiate Athletics for Women (CIAW) which encouraged and sanctioned the concept of national championships. "The first was held in gymnastics in 1969 (Thorpe, 1974, p. 59)."

The growth of the program brought about a need for a more formally organized structure. In 1971, then, the Association for Intercollegiate Athletics for Women (AIAW) was founded. It accepted 280 institutions as members in its initial year of operation. Presently, national championships are held in seven sports: badminton, basketball, golf, gymnastics, swimming, track and field, and volleyball (Thorpe, 1974).

In 1973, AIAW experienced its first lawsuit in a challenge of the scholarship policy. AIAW called for a vote of its member institutions and of those responding, 80% agreed that a change of the existing no scholarship policy would have to be made (Miller, 1974). Interim regulations for awarding financial aid to women athletes and for recruitment of athletes were written in March, 1973 (Miller, 1974). AIAW held its first Delegate Assembly in November of 1973, at which time basic issues concerning the future of the Association were discussed.

In 1972, a legal mandate for equality of athletic opportunity regardless of sex became law. The mandate is known as Title IX of the Education Amendments of 1972. The key section of Title IX relating to athletics as part of the educational program reads:

No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of or be subjected to discrimination under any

educational program or activity receiving Federal financial assistance (Project on Women, 1974, p. 3).

All educational institutions receiving financial aid from the federal government are covered by this anti-discriminatory statement.

The implementing regulations for Title IX were not recorded in the Federal Registry until June of 1974. The delay was due to the difficulty writers had in preparing the Guidelines specifically concerned with athletics. Under the provisions of Title IX:

- (1) A recipient which operates competitive athletics may, in any particular sport, operate separate teams for each sex, or a single team for which members of each sex are selected without discrimination on the basis of sex.
- (2) If such recipient operates such a single team in a particular sport, and if substantially more members of one than of the other sex are selected for such team, such recipient shall provide comparable opportunities to participate in the same sport or other sports, for members of such other sex. . . (Gerber, 1974, p. 18).

The legal status that is expected to result from this amendment for ". . . women in sport in institutions of education is about to force a radical change in women's sport (Gerber, 1974, p. 18)."

Title IX also insists that institutions

. . . shall not discriminate on the basis of sex in provision of equipment and supplies, scheduling of games and practice times, travel and per diem allowance, award of athletic scholarships, opportunity to receive coaching and instruction, provision of locker room and medical facilities and services, publicity, or otherwise. . . (Gerber, 1974, p. 18).

Anticipated effects of Title IX caused both men and women in athletics to be unhappy and uncomfortable. Obviously, men were discontented with increased budgets, coaching facilities and overall general equality the women have already demanded and achieved. The

women leaders in athletics were conscious of "malpractice" in men's athletics since the 1900's. AIAW had sought to prevent the awarding of athletic scholarships for women on the grounds that it might lead to the exploitation of the athlete and to problems similar to those which the men have encountered. But, according to Gerber (1974), this issue is secondary to all the other opportunities that will be open to women across the country within the next few years.

The American woman in sport emerged similarly as the culture in which she has been a part developed. Women in sport, through the years, experienced many setbacks due to physiological misconceptions, the female role as it has been defined by society, sex role stereotyping, and the overall inequality of the sexes.

In the 1970's legal action was taken to assure the American sportswoman an equal place on the athletic fields and playing courts of educational institutions. The growth in female participation in sport increased steadily over the last two decades. New found equality is expected to make available more opportunities for women in sport.

#### The Coach

Good leadership is always important to the success of any undertaking. The more highly competitive intercollegiate sport programs for women evolving today demand an especially high caliber of leadership. A look at the characteristics of coaches as they have been compiled by writers in the field is warranted to better understand the qualities the woman coach of the future may strive to possess.

Singer (1972) described the coach as a leader of athletes, a molder of team unity, and a source of inspiration. Most of the published works about the coach's role in the sport situation refer to the necessary characteristics of the "good" coach. Although little research is available on the characteristics of the successful woman coach, Neal (1969) recommended that the attributes desirable for women are similar to those desirable traits of successful male coaches.

The role of teacher is deemed important by many interested in the characteristics of the coach (Cratty, 1973). Miller (1974) contends that the terms "teacher" and "coach" are synonymous in the sense that they mean ". . . to instruct, to lead, to guide the actions of students (Miller, 1974, p. 46)." Miller cited four common roles of the teacher and coach: (1) sound principles of instruction must form the basis of both effective teaching and effective coaching, (2) both must remain constant students of their game, (3) both are educators and (4) both are concerned with various publics (Miller, 1974, p. 46-47). Kieth (1967) also emphasized the importance of the coach's ability to teach.

Counsilman (1972), noted swimming coach, maintained that the use of psychology takes precedence over the knowledge of good stroke mechanics and physiology. The key to coaching success, according to Counsilman, is the ability to inspire confidence.

Tutko and Richards (1971) identified various types of coaches. They alleged that the coach's personality may shape the personality of the athlete with whom he worked. They emphasized



the importance of the coach's attempt to gain and maintain the athlete's respect. Five main characteristics of coaching behavior which bring about respect for the coach cited by Tutko and Richards (1971) were: (1) knowledge of the sport, (2) concern for the individual, (3) fairness, (4) being a good example and (5) a symbol of maturity (p. 11-12).

Neal (1969), a popular and successful woman's basketball coach, addressed ten characteristics of the good coach.

A coach should: (1) understand the workings of the human body, (2) know the best and most up-to-date methods for training and conditioning athletes, (3) have the ability to analyze and correct form, (4) have insight about how to best use personnel, (5) believe in the values of competition, (6) be aware of opportunities for personality development in sports, (7) have the qualities of dedication, enthusiasm, and initiative, (8) be capable of selflessness, (9) understand psychology, and (10) have a sense of responsibility to players and public (Neal, 1969, p. 4-5).

Neal placed great importance on the philosophy of coaching as it related to teaching and to the level of skill to be developed.

Tutko and Richards (1971) also emphasized the development of a sound philosophy. The authors suggested four major considerations in forming a philosophy of coaching. "Competition and winning" was an important consideration. The authors felt that winning games was the yardstick measuring coaching success for too long. Of greater importance to the coach should be the development of the person. How to "approach the athlete" was a major concern. Coaches should not overlook the fact that they must adjust to different personalities as well as to the talent. "Motivating the athlete" entailed knowing the value of both



positive and negative reward. The coach should reinforce the athletes using a combination of these of equal intensity. The coach must formulate an attitude toward "losing." Learning to lose is the toughest aspect of coaching. The coach's attitude will influence that of his players (Tutko and Richards, 1971, pp. 3-10).

Moore (1962) listed necessary traits of the good coach including loyalty, understanding, energy, professional behavior, organization, and enjoyment of teaching and sportsmanship. Cratty (1973) suggested that superior coaches possess personality traits reflecting emotional self-control, aggressiveness, intelligence, high needs for activity, toughmindedness, and stableness.

Most of the literature involving women in coaching emphasized the need for more highly qualified coaches. Neal (1969) argued not too many years ago that either men take over our programs or that women be trained in the colleges and universities. Hartman (1968) emphasized both the importance of coaching courses for women and aid from men in expanding our knowledge. Miller (1974) also suggested that better preparation of women coaches in our universities and colleges be required.

#### Research Related to Coaching

Hendry (1969) attempted to examine the views of coaches and swimmers regarding the "ideal coach." The degree to which these views compared with the actual personality traits of highly successful coaches was also investigated. Analysis of Hendry's data suggested that the actual personality traits of highly

successful coaches and the constructed "ideal" personality were not at all alike. The "ideal coach" was described as dominating, outgoing, and decisive (Hendry, 1969), p. 304).

La Grand (1971) utilized the semantic differential technique to investigate the range of responses of athletes to the behavioral characteristics of their coaches. A further purpose of the study was to compare the resulting profiles of the individual sport coach and the team sport coach based on these characteristics. The concepts used in the semantic differential were based on expert's opinions of desirable coaching behavior, a pilot study, and a review of pertinent literature. The concepts were as follows: methods of teaching, use of discipline, ability to inspire, knowledge of the sport, use of humor, enthusiasm demands for hard work, understanding the athlete as an individual, personal appearance, interest in each player, willingness to give individual help, interest in the athlete's out of school activities, ability to organize and ability for personal demonstration (La Grand, 1971, p. 452A). A hierarchy of behavioral characteristics of athletic coaches was established as a result of the study. "Knowledge of the sport" ranked highest. This is in contrast to Counsilman's notions. See page 28. "Enthusiasm" also had special importance to subjects. La Grand summarized that the study

. . . seemed to indicate that coaches should give special concern to developing a sensitivity and understanding of the individual attitudes and needs of the athlete. In addition, a thorough knowledge of the technical aspects of the sport appears to be an impressive tool in establishing player-coach rapport (La Grand, 1971, p. 452A).

Patrow (1971) studied the psychosocial characteristics of coaches and their relationships to coaching success. The general problem was to compare coaching success among selected baseball and track coaches with the measured personality dimensions of dogmatism, acceptance of self, and acceptance of others. The two major findings were:

- (1) The greater the degree of dogmatism and acceptance of self within the group of baseball coaches, the less they experienced coaching success.
- (2) Track coaches showed a positive relationship between acceptance of others and coaching success (Patrow, 1971, p. 3078A).

Buhrer (1973) reported her efforts to determine the perceptions of the concepts "woman athlete" and "woman coach," as held by a selected sample of women athletes and women coaches. She utilized the semantic differential to measure the perceptions. Profile analysis showed the "woman coach" to be slightly relaxed, affectionate, competitive, experimental and fast as perceived by woman athletes. There were no extreme scores although, the "woman coach" was considered to be quite interesting, nice, and intelligent by women athletes. The "woman coach" perceived by women coaches received the most neutral scores, indicating least distinctiveness in meaning of those studied. The "woman coach" was considered to be slightly attractive, interesting, nice, feminine, affectionate, competitive, and fast (Buhrer, 1973, p. 106-107).

Most of the published material about coaching, then, deals with the male coach. Attributes associated with the successful male coach are believed to be in general, desirable characteristics for the woman coach. Certain characteristics and personality traits

have been identified as valuable for coaches to possess. The concept of "ideal coach" has not been developed fully. Much more research is needed involving coaching and specifically concerned with the woman coach.

### Q Methodology

The Q-sort technique, as described by Stephenson (1953), is a relatively new technique. Q-methodology, according to Kerlinger (1973), was a general name used by Stephenson ". . . to characterize a set of philosophical, psychological, statistical and psychometric ideas oriented to research on the individual (Kerlinger, 1973, p. 582)." Q-technique involves a set of procedures which calls for the sorting of decks of cards called Q-sorts for implementing Q-methodology.

Q-sorting is a sophisticated ranking of items. The array of statements or items can be derived in a variety of ways. For best results, items usually number from 60 to 120. The items are ranked along a continuum according to the subject's rating of importance to himself or herself (Stephenson, 1953; Mowrer, 1953; Kerlinger, 1973).

Stephenson (1952) pointed out that he described quantitative principles for Q as early as 1935. They were summarized later as follows: (1) the populations are statements, traits, or the like; (2) variates refer to operations of a single person in one interactional setting; (3) the transitory postulate has reference to intra-individual differences of "significance;" (4) variates may

interact; (5) scores are approximately normal; (6) all important information is contained in the array scores and not in the means; (7) the operations are all subject to the principle of randomization; and (8) the concern is with dependency analysis (Stephenson, 1952, p. 484-485).

Whittenborn (1961) described Stephenson's view of Q-methodology as follows: (1) it appears to require ipsative variables, (2) it lends itself to correlations between people or between different conditions for the same person, (3) it requires a conceptually structured set of statements to interpret the correlations between people, (4) it permits a study of a person by means of analysis of variance of the statements, (5) it favors a dependency type emphasis in factor analysis with rotations determined by the nature of the propositions concerning the variables and (6) it leaves the question of the parent population from which the individual is drawn unanswered (Whittenborn, 1961, p. 134).

The use of Q-methodology has provoked both favorable and unfavorable reactions. Block (1956) contended that Q sorting procedures had been so widely used for three main reasons:

- (1) The forced-sorting technique enables comparison between judges to be made straight forwardly without distortions due to 'response sets'.
- (2) From a computational standpoint forced data are extremely convenient.
- (3) Most important, the procedure provides a set of operations readily linked to clinical and personality concepts (Block, 1956, p. 481).

Livson and Nichols (1956) wrote that although the Q-sort, as conceived by Stephenson, was to serve as a tool for his



Q-methodology, it has answered the demands of a wide variety of research problems in psychology. The fact that such a relatively simple technique could be involved in such a broad range of problems was attributed to the sorting procedure's ". . . ability to speak both the language of the clinician's highly idiosyncratic case descriptions and the researcher's quantified generalizations (Livson and Nichols, 1956, p. 159)." Communication between these two attitudes is a condition crucial for effective research. The authors further contended that perhaps the property most responsible for the communicative advantages of the Q-sort is that the individual provides his or her own frame of reference. Items are arranged in order of their degree of importance to the individual.

Seeman and Raskin (1953) reviewed recent personality research employing the Q-sort and noted that ". . . the Q-sorting instrument. . . provides an efficient method of securing a large number of ratings which can be compared from person to person (Seeman and Raskin, 1953, p. 233)." They added, however, that it was necessary to realize that in studies involving self-report, what is being measured is the "report of self" and not the actual self.

Kerlinger (1956) found the greatest advantage of Q-sorting to be in the studying of attitudes and values. He wrote:

It would seem that Q offers unique advantages in studying attitudes and values. Values always involve choices - between 'good' and 'bad', 'better' or 'worse' and so on. Attitudes, too, are 'choices', 'already made' choices, in that they are sets of predispositions to certain kinds of behavior. And the essence of Q is choice: one sorts a deck of statements according to how much one favors or does not favor the statements (Kerlinger, 1956, p. 285).



Stephenson (1952) described the use of "structured" and "unstructured" samples of items. An unstructured sample is a set of statements which have not been divided in any way by the experimenter into smaller subsets. A structured sample, then, includes at least two types of items with an equal number of each kind. For example, a personality test designed to measure dominance and submission would include 30 items of each to equal the 60 statements of a 60 statement sort. This is the simplest form of a structured sample. The present study involves four dimensions of coaching behavior. The sample was structured so that 15 items represent each of the four dimensions to make up a 60 sort test.

Structured and unstructured samples of items have a score for each of the statements for each of the subjects involved. Unstructured samples require the analysis of data be carried out by correlating the scores assigned to the items for all possible pairs of subjects and then factoring the obtained correlation matrix. For unstructured samples correlations between subjects can also be obtained. Structured samples permit an analysis of variance of the scores obtained from each single subject (Stephenson, 1952).

Much of the unfavorable reaction to the use of Q-methodology has revolved around the controversy of forced vs. unforced Q-sorting. Unforced Q-sorting would involve the sorter in distributing the items or statements as he or she chooses among the available categories of response. The forced Q-sort requires the sorter to arrange the items so as to have the same arrangement of all other sorts, thus, to have the same mean and standard deviation.

Cronbach (1953) suggested the use of the unforced sort. He was concerned with the possible loss of useful information as a result of eliminating elevation and scatter in the forced sort.

After studying the use of forced distribution procedures and free-sort procedures, Jones (1956) concluded that current forced distribution procedures result in a significant loss of information which could be retained by use of "free-sort" procedures. Requiring all subjects to arrange their evaluations so as to have the same mean and standard deviation possibly causes the loss of important discriminations.

Block (1956) studied this criticism of forced sorting and attempted to answer two questions: "(1) Of the two sorting procedures, which tends to provide more data? (2) Of the two sorting procedures, which tends to offer more discriminations (Block, 1956, p. 483)?" He found that the forced sort was at least as stable as the unforced sort. In his experiment, the forced procedures did not decrease the reliable variance present. The forced sort provided more discriminations than were contained in the unforced data. This difference was minimal, however, and not found to have appreciable consequences.

The findings affirm the conventional use of the forced Q-sorting procedure in that with a variety of Q-sorts and sorting tasks, item sortings under the forced condition appear to be more stable and discriminatory than item sortings under the unforced condition (Block, 1956, p. 487).

Stephenson (1953), supporting predetermined distribution, argued that the assumption of randomness required in statistical

tests was fulfilled under these conditions because the sorter's judgement in the sorting may be regarded as randomly given.

A primary criticism of Q-sorts has been the lack of statistical design. Wittenborn (1961) suggested that studies should submit the Q-sort arrays to an analysis of variance, since the differences or similarity between the sorts of two individuals, or the sorts of an individual under two or more conditions must be explained in terms of the sorted items which comprise the Q arrays.

Edwards and Horst (1953) concerned themselves with social desirability as a significant factor in Q technique. They found that studies have demonstrated that social desirability is a significant factor in self descriptions and the influence of this variable should be considered when constructing samples of items for Q studies. The controlling of the social desirability variable in one study made the interpretations of data much clearer than would have been the case if social desirability was uncontrolled and affected one of the major trait classifications of the items.

Cattell (1952) cited a disadvantage of the Q technique in the importance placed on the subjects' understanding of "significance" in order to participate in the Q sorting experiment. Cattell found this to be a confusing requirement. He argued that when a subject is instructed to rate behavior according to its "significance" for him or her, the differing subjective perceptions of this instruction would add a dimension of error to the subjectivity inherent in the replies. In the present study, the personalization of the sorting task to "most" and "least" hopefully avoided some of the above cited controversy.

Only a few studies involving physical education and sport research utilizing Q-sorts as a measuring tool could be located. Doudlah (1962), in an early study, explored the relationships between the concepts of self, body image and movement. Later, Nation (1963), utilizing Doudlah's Q-sort statements, investigated the effect of physical education instruction on the movement concept. Richardson (1967) studied different approaches to movement concept utilizing the Q-sort technique.

Achievement motivation in the sport setting was studied by Plummer (1969). He administered a Q-sort to gymnasts and baseball players. Berlin recently reported a study involving the Q-sort to determine motives of college women athletes (Gerber, et al., 1974). The purpose of her study was to attempt to formulate a hypothetical structure or model, of the motives of college women athletes.

### CHAPTER III

#### PROCEDURES

In attempting to answer the questions which frame this research, literature was first reviewed to specify the problem as well as strengthen the investigator's background for pursuing the study. Thereafter, the following steps were taken in conducting the inquiry.

#### Selection of the Q-Technique

In seeking the best test to measure expectations of athletes, the Q-technique, as described by Stephenson (1953), was selected. The investigator felt that the advantages of Q far outweigh any other technique when measuring individual's values and expectations. Some of the advantages of the Q-sort methodology that influenced this selection are:

1. A great many discriminations are made (Block, 1956, p. 484).
2. A value judgement is not placed on the items nor imposed on the subject, the interpretation of items is left to the subject.
3. All subjects make the same number of discriminations, comparison between orderings is straightforward, rapid and without ambiguity (Block, 1956, p. 488).

4. Q-sort gives factors which reflect difference within subjects (Stephenson, 1953, p. 79).
5. Q-sorting allows the structuring of the sample into subsets. Analysis of variance can be calculated between these subsets.
6. Q-sorts allow for the efficient use of statistical and computational techniques.

#### Construction and Refinement of the Q-Sort

The Q-sort procedure requires the subject to sort a set of statements into a series of piles. Most studies involving Q-sorts include self-reference statements which are sorted along a continuum of appropriateness of self-description, from those that are "most like me" to those that are "least like me." In the present study, the statements were concerned with coaching behavior and were sorted along the continuum according to "most valued" and "least valued."

The number of statements varies from study to study although arrangement of the statements in a forced choice sort always approximates a normal distribution. In the present study, a total of 60 statements was used.

A very careful process was followed in the development of the statements. Open-ended statements about expectations of coaching style were first solicited from women intercollegiate athletes at The University of North Carolina at Greensboro. It was felt that this step, in part, guaranteed that the origin of



the statements was directly associated with the subjects of the study. The investigator's contributions to the original pool of statements were derived from her review of literature about coaching. Thus, 83 statements were formulated and categorized according to the dimension of coaching. Judges' ratings were utilized to check the appropriateness of each statement for its respective category. The judges who participated were:

1. A female undergraduate student majoring in physical education who was an intercollegiate participant in field hockey, basketball and tennis. She was co-captain of both the hockey and basketball teams in the 1973-74 seasons, her junior year.
2. A female undergraduate student majoring in physical education who was an intercollegiate participant in field hockey, basketball and golf. She was a nationally ranked amateur golfer as a sophomore.
3. The head women's field hockey and basketball coach at The University of North Carolina at Greensboro. She also had competitive athletic experience in both hockey and basketball.
4. The head women's swimming coach at The University of North Carolina at Greensboro.
5. A doctoral student at The University of North Carolina at Greensboro who presently serves as Chairman, Joint NAGWS-AAU Women's Basketball Rules Committee, Chairman AIAW Women's Basketball Committee, and a member of the

United States Collegiate Sports Council Sub-Committee; she is also head basketball and softball coach at Illinois State University. She has had competitive athletic experience in basketball, field hockey and softball.

6. A doctoral student at The University of North Carolina at Greensboro who is presently Region II representative to AIAW and head field hockey coach at Appalachian State University.
7. The women's head golf coach at The University of North Carolina at Greensboro with previous playing experience in both golf and basketball. She was formerly a member of the LPGA circuit.

The judges then consisted of two student athletes, two practicing female collegiate coaches, two professionally trained leaders concerned with the current sport movement who are also coaches, and one professional woman athlete who is now a coach.

Each judge was provided with a list of the 83 statements and instructions pertaining to categorization of each statement into the appropriate dimension of coaching style. The dimensions of coaching style as operationally defined for this study were presented to the judges. The judges were instructed to place the number of the dimension most appropriate for each statement in the space provided. They were also instructed to use the designation "X" for those statements that seemed irrelevant or did not clearly fit into one of the dimensions defined. A sample of the

original 83 statements as they were presented to the judges along with the direction sheet is provided in Appendix B.

Statements agreed upon by five judges as belonging to the same dimension were arbitrarily accepted for the study. Statements receiving two or more "X's" were automatically rejected. Fifteen statements were needed for each dimension of coaching behavior in order to obtain the 60 item sort. Those statements receiving vote totals of 7 to 0 or 6 to 1 were chosen first for each dimension.

Twenty-nine statements received at least a 5 to 2 vote for the dimensions of Philosophical Commitments with 18 of those receiving a 7 to 0 vote. The 15 statements for this dimension were picked at random from those 18.

Seventeen statements were deemed appropriate by the judges for the dimension Technical Knowledges/Competencies. The 15 statements needed were chosen first by identifying those statements in which all judges were in agreement as well as those with which only one judge disagreed. The remainder of the statements receiving a 5 to 2 vote were chosen at random to make up the 15 statement total.

Sixteen statements received judges approval for the dimension Personality Traits. One of the statements receiving a score of 5 to 2 was rejected at random. The dimension General Mannerisms only had 15 statements approved by the judges so they were all included in the final 60 item sort.

In total, 23 statements were rejected. Table 1 presents the ratings given by each judge to the 83 statements. The 60 statements as they were categorized according to dimension by the judges are provided in Appendix B.

Table 1

Evaluation of Statements Relative to the  
Four Dimensions of Coaching

State- ment #	Judge 1	Judge 2	Judge 3	Judge 4	Judge 5	Judge 6	Judge 7	Accepted=+ Rejected=-
1	3	3	3	3	3	3	3	-
2	1	1	2	1	1	2	1	+
3	2	2	2	2	2	2	2	+
4	4	4	4	4	4	4	4	+
5	3	3	3	3	3	3	3	+
6	1	1	2	1	1	3	1	+
7	3	3	3	3	3	3	3	+
8	2	2	2	2	1	1	2	+
9	4	4	4	4	4	4	4	+
10	3	3	3	3	3	3	3	+
11	1	1	2	1	1	3	1	+
12	4	3	3	3	3	3	3	-
13	2	1	2	1	1	1	1	+
14	4	4	4	4	4	4	4	+
15	3	3	3	3	3	3	3	+
16	1	4	4	3	4	4	4	+
17	2	2	2	2	2	2	4	+
18	4	4	4	4	4	4	4	+
19	3	3	3	3	3	3	3	+
20	1	2	1	1	1	3	1	+
21	2	2	X	2	2	2	2	+
22	3	3	3	3	3	3	3	-

Table 1 (Continued)

State- ment #	Judge 1	Judge 2	Judge 3	Judge 4	Judge 5	Judge 6	Judge 7	Accepted=+ Rejected=-
23	3	4	4	4	4	4	4	+
24	3	3	3	3	3	3	3	+
25	1	2	1	1	1	3	1	+
26	2	3	2	3	2	2	2	+
27	4	4	4	4	4	4	4	+
28	3	3	3	3	3	3	3	+
29	4	4	4	4	4	4	4	+
30	2	2	2	2	2	3	2	+
31	1	1	1	1	1	4	1	+
32	3	3	3	4	3	2	3	-
33	3	3	3	4	3	2	3	+
34	4	3	3	4	4	3	4	-
35	2	2	2	2	2	3	2	+
36	1	2	1	1	1	3	1	+
37	3	3	3	3	4	3	3	-
38	3	3	2	2	3	3	3	-
39	3	3	3	3	3	3	3	+
40	1	1	2	1	1	3	1	+
41	4	4	4	4	4	X	4	+
42	1	1	2	1	1	2	1	+
43	3	3	3	3	3	3	3	+
44	3	4	X	4	4	X	4	-
45	4	4	4	4	4	X	4	+

Table 1 (Continued)

State- ment #	Judge 1	Judge 2	Judge 3	Judge 4	Judge 5	Judge 6	Judge 7	Accepted=+ Rejected=-
46	2	2	2	2	2	2	2	+
47	3	3	3	3	3	3	4	-
48	3	3	3	3	3	3	3	+
49	4	4	4	4	4	4	4	+
50	3	4	3	3	3	3	4	-
51	2	2	X	2	2	3	2	+
52	1	1	3	1	1	3	1	-
53	2	2	2	2	2	3	2	+
54	1	1	2	1	1	2	1	+
55	3	3	3	3	3	3	2	-
56	3	3	3	3	3	3	3	+
57	4	4	4	3	4	4	4	+
58	3	1	3	3	4	3	2	+
59	2	2	X	2	2	2	2	+
60	3	1	3	3	1	3	1	-
61	1	1	3	1	1	3	1	+
62	3	3	3	3	3	3	3	-
63	3	4	4	4	4	X	4	+
64	3	3	3	4	3	3	3	+
65	1	2	X	2	2	2	2	+
66	2	3	3	3	3	3	2	-
67	4	3	3	3	4	2	3	-



Table 1 (Continued)

State- ment #	Judge 1	Judge 2	Judge 3	Judge 4	Judge 5	Judge 6	Judge 7	Accepted=+ Rejected=-
68	1	1	2	1	1	3	1	+
69	3	3	3	3	3	3	3	-
70	1	3	3	1	3	3	1	-
71	2	2	X	2	2	2	2	+
72	3	3	3	3	3	3	3	+
73	4	4	3	4	4	3	4	+
74	2	2	X	2	2	2	2	+
75	4	4	3	4	4	3	4	+
76	2	2	X	1	2	2	2	-
77	3	3	3	3	3	3	3	+
78	2	2	X	2	2	1	2	+
79	3	1	3	3	3	3	1	-
80	4	4	3	4	4	3	4	-
81	3	3	3	3	4	3	3	-
82	1	1	3	1	3	3	1	-
83	1	1	1	1	1	1	1	+

### Preparation of Materials for Administration

The final 60 statements were randomly numbered from one to 60. Each statement was typed on a plain, white, three by five card. Thirty-five decks of cards were prepared using a photocopy technique. Forced choice sheets were made in which blocks represented the number of derived responses along the continuum. Subjects were required to write the number of the statement in the appropriate boxes. A biographical information sheet was compiled to determine the subject's school, age, grade point average, year in school, sport participation, and sport preference. The biographical information sheet, direction sheet, and answer sheet provided for the subjects are found in Appendix C.

### Selection of the Subjects

Intercollegiate women athletes from colleges and universities in the state of North Carolina were selected for the study. Thirteen institutions within the state were contacted initially by letter which was addressed to the coach. A self-addressed, stamped postcard was enclosed to facilitate responding. Six institutions indicated willingness to take part in the study; three institutions replied negatively. Regrettably, three institutions did not respond at all. The following institutions took part in the study: Campbell College, Catawba College, Elon College, High Point College, Peace College, and The University of North Carolina at Greensboro. A follow-up phone call to the

athletic director or coach was utilized to arrange the exact day and time of sort administration.

The institutions contacted were chosen because of their participation in NCAIAW State Championships. One hundred twenty intercollegiate athletes participated in the study. The number of participants representing each institution varies due to the different enrollments of the schools and also due to the differing sizes of their athletic programs for women. Facts pertaining to the number of participants from each school are provided in Appendix D.

Participating athletes were required to have been an active member of a varsity squad representing their institution during the 1973-74 academic year. General biographical information was obtained at the time of testing. A summary of these data appear in Appendix D.

#### Administration of the Q-Sorts

The Q-sort was administered by the investigator to insure that sorting procedures remained the same for each administration. Materials were distributed and the subjects instructed to read the directions to themselves. The investigator then read the directions aloud and answered all questions. The directions used were modified from those used by Berlin (Gerber et al., 1974, p. 348). A sample direction sheet can be found in Appendix C.

The athletes from The University of North Carolina at Greensboro were the first subjects to take part in the sorting. The

investigator acted as both assistant volleyball and basketball coach at the University and believed the students would cooperate and feel free to ask questions. This procedure was followed to allow this session to serve as a training experience for the investigator.

The large number of subjects at The University of North Carolina at Greensboro necessitated two different administrations of the sort to accommodate all those who could participate. At each of the five other institutions, only one sorting session was conducted.

The range of time for subjects to complete the sorting varied from 28 minutes to 85 minutes. The Q-sort allows the individual to work at her own pace. Athletes at each of the institutions responded favorably to the test and many times stayed over to discuss the study. All of the coaches showed great interest and requested a copy of the results.

#### Tabulation and Scoring the Q-Sorts

In order to facilitate scoring, all sort responses were converted from the original response sheet to a numerical conversion chart. This step merely provided an opportunity for the investigator to assign the sort value on a "fixed" form. A conversion sheet is presented in Appendix G. The two statements "most valued" by subjects received a score of 10, the next three "most valued" a score of 9, and so on, until the two "least valued" received a score of 0. Numerical values then, were assigned to

each statement for each sort in accord with the following forced-choice normal distribution approximation:

Self-reference

Cards per pile    2   3   4   7   9   10   9   7   4   3   2

---

Values            10   9   8   7   6   5   4   3   2   1   0

Analysis of Obtained Data

To determine which statements were "most valued" by the 120 subjects and "least valued" by the subjects, it was necessary to compute the mean scores for all 60 statements. The 60 statements were rank ordered according to their mean score. The ranked statements in their entirety can be found in Appendix E.

The statements were then categorized into the dimensions of coaching style and mean scores were computed for each dimension. To discern whether or not differences existed among the four dimensions of coaching, an analysis of variance was calculated among representative mean values of the 15 statements within each of the four categories: general mannerisms, personality traits, philosophical commitments, and technical knowledges/competencies. The Newman-Keuls statistical procedure was then utilized to determine where the significant difference existed.

## CHAPTER IV

### DATA, ANALYSIS AND DISCUSSION

The analysis of data was carried out to permit answering the questions framing this research. One aspect of analysis, therefore, was concerned with the ranking of each individual statement by the subjects. Secondly, responses to the groups of statements representing the four dimensions of coaching style were examined and tested statistically to permit answering the third question to which the research is addressed.

#### Data

Mean scores for each statement were computed. These scores then enabled the investigator to rank the statements as they were "valued" by the 120 athletes. Table 2 presents each one of the statements, ranked highest to lowest. It also reports the mean score, representative dimension and the rank of the statement.

The mean score for each of the four dimensions of coaching style were then determined. These are presented in Table 3.

#### Analysis of Data

##### Most Valued Expectations

Table 4 presents the 10 "most valued" and "least valued" statements. The two highest ranking statements were representative



Table 2  
Statements Ranked Highest to Lowest,  
Means, Dimensions, and Rank

State- ment Number	Statement	Rank	Mean	Dimension
7.	Consider each athlete as an individual.	1	8.69	P.C.
27.	Instill within her players the belief that winning is great but playing and loving the game is greater.	2	8.15	P.C.
17.	Exhibit enthusiasm.	3	7.2	G.M.
38.	Provide constructive criticism in order to assist players in improving.	4	7.19	T.K./C
36.	Be honest.	5.5	7.00	P.T.
23.	Be knowledgeable in all rules and regulations of the game.	5.5	7.00	T.K./C
22.	Be understanding.	7	6.97	P.T.
50.	Be fair.	8.5	6.85	P.T.
12.	Demonstrate knowledges of game strategies and apply them in different game situations.	8.5	6.85	T.K./C
14.	Be able to recognize and correct faulty skill execution.	10	6.78	T.K./C
45.	Cause players to strive to develop their character.	11	6.53	P.C.
53.	Be patient.	12	6.44	P.T.
47.	Be sincere.	13	6.35	P.T.
34.	Be openminded.	14	6.17	P.T.
21.	Be knowledgeable about the psychological aspects of sport participation	15	6.16	T.K./C

Table 2 (Continued)

State- ment Number	Statement	Rank	Mean	Dimension
26.	Possess a sense of humor.	16	6.05	P.T.
48.	Be friendly.	17.5	5.97	P.C.
25.	Require players to display proper conduct while playing or sitting on the bench.	17.5	5.97	P.C.
54.	Know how to deal with athletic injuries.	19	5.93	T.K./C
44.	Express pleasure as well as displeasure.	20	5.91	G.M.
42.	Identify goals held for the team.	21.5	5.85	P.C.
32.	Respect personhood above athletic ability.	21.5	5.85	P.C.
31.	Maintain her composure during game.	23	5.76	G.M.
11.	Be exemplary on and off court.	24	5.62	G.M.
29.	Be a well-rounded individual.	25	5.59	P.T.
43.	Use game-like practice drills.	26	5.54	T.K./C
6.	Be knowledgeable in the physiological factors pertaining to the rehabilitation of the injured athlete.	27.5	5.52	T.K./C
60.	Replace an athlete who appears injured or displays undesirable behavior.	27.5	5.52	P.C.
5.	Make physical demands on team members during practice sessions.	29	5.40	T.K./C
33.	Provide immediate feedback or knowledge of results concerning performance when taken from game.	30	5.35	T.K./C
1.	Be outgoing.	31	5.28	P.T.

Table 2 (Continued)

State- ment Number	Statement	Rank	Mean	Dimension
8.	Conduct highly organized practice sessions.	32	5.23	T.K./C
24.	Be sensitive.	33	5.20	P.T.
18.	Allow team members to choose their own leaders or captains.	34	5.12	P.C.
37.	Be skilled in her sport.	35	4.99	T.K./C
2.	Be dynamic.	36	4.82	P.T.
19.	Refrain from vulgarities.	37	4.74	G.M.
49.	Utilize the latest conditioning and training techniques.	38	4.63	T.K./C
9.	Actively participate in practice sessions.	39.5	4.60	T.K./C
4.	View academics as first priority for players.	39.5	4.60	P.C.
30.	Dress neatly.	41	4.42	G.M.
55.	Maintain a low key manner in tense situations.	42	4.30	G.M.
16.	Help players understand the importance of winning.	43	4.28	P.C.
35.	Expect players to look and act like ladies at all times.	44	4.20	P.C.
39.	Be intellectual.	45	3.95	P.T.
13.	Be dominant.	46	3.66	P.T.
56.	Allow players to determine their own team rules and regulations	47	3.60	P.C.
46.	Give team members an opportunity to play in every game.	48	3.45	P.C.

Table 2 (Continued)

State- ment Number	Statement	Rank	Mean	Dimension
52.	Dress appropriately for practice sessions.	49	3.29	G.M.
28.	Consult team members with regard to scheduling of opponents.	50	3.14	P.C.
15.	Dress stylishly for games.	51	2.92	G.M.
59.	Never smoke in front of players.	52	2.75	G.M.
20.	Be a rated official.	53	2.72	T.K./C
51.	Be happy-go-lucky.	54	2.56	P.T.
41.	Be a non-smoker.	55	2.52	G.M.
3.	Show displeasure with officials if they make mistakes.	56	2.34	G.M.
57.	Wear school colors during competitive events.	57	2.29	G.M.
58.	Show anger when team makes mistakes.	58	1.76	G.M.
40.	Swear occasionally in the heat of a game.	59	1.69	G.M.
10.	View winning as everything.	60	1.16	P.C.

Table 3  
Mean Scores of Four Dimensions  
of Coaching Statements

General Mannerisms		Personality Traits		Philosophical Commitments		Technical Knowledges/Competencies	
State- ment #	Mean	State- ment #	Mean	State- ment #	Mean	State- ment #	Mean
17.	7.20	36.	7.00	7.	8.69	38.	7.19
44.	5.91	22.	6.97	27.	8.15	23.	7.00
31.	5.76	50.	6.85	45.	6.53	12.	6.85
11.	5.62	53.	6.44	25.	5.97	14.	6.78
19.	4.74	47.	6.35	32.	5.85	21.	6.16
30.	4.42	34.	6.17	42.	5.85	54.	5.93
55.	4.30	26.	6.05	60.	5.52	43.	5.54
52.	3.29	48.	5.97	18.	5.12	6.	5.52
15.	2.92	29.	5.59	4.	4.60	5.	5.40
59.	2.75	1.	5.28	16.	4.28	33.	5.35
41.	2.52	24.	5.20	35.	4.20	8.	5.23
3.	2.34	2.	4.82	56.	3.60	49.	4.63
57.	2.29	39.	3.95	46.	3.45	9.	4.60
58.	1.76	13.	3.66	28.	3.14	37.	4.99
40.	1.69	51.	2.56	10.	1.16	20.	2.72
Dimension Means:							
$M_{GM} = 3.83$		$M_{PT} = 5.52$		$M_{PC} = 5.07$		$M_{TKC} = 5.59$	

Table 4

10 "Most Valued" and "Least Valued"  
Q-Sort Statements

Statement	Mean	Rank	Dimension
<u>Most Valued</u>			
7.	8.69	1	P.C.
27.	8.15	2	P.C.
17.	7.20	3	G.M.
38.	7.19	4	T.K./C
36.	7.00	5.5	P.T.
23.	7.00	5.5	T.K./C
22.	6.97	7	P.T.
50.	6.85	8.5	P.T.
12.	6.85	8.5	T.K./C
14.	6.78	10	T.K./C
<u>Least Valued</u>			
10.	1.16	60	P.C.
40.	1.69	59	G.M.
58.	1.76	58	G.M.
57.	2.29	57	G.M.
3.	2.34	56	G.M.
41.	2.52	55	G.M.
51.	2.56	54	P.T.
20.	2.72	53	T.K./C
59.	2.75	52	G.M.
15.	2.92	51	G.M.

Mean Range = 0 - 10

N = 120



of the "philosophical commitments" dimension of coaching style. The statement "Consider each athlete as an individual" was ranked highest by the athletes with a mean score of 8.69. "Instill within her players the belief that winning is great but playing and loving the game is greater" was valued second highest by the athletes with a mean score of 8.15. The mean scores of the two highest ranking statements were considerably higher than the third statement mean score.

The third most valued statement by the athletes was "exhibit enthusiasm," a "general mannerism" statement with a mean score of 7.20. "Constructive criticism to assist players in improving" was one of the "technical knowledge/competencies" statements valued by the athletes. This statement ranked fourth and had a mean score of 7.19. The "personality trait" dimension statement "be honest" received a mean score of 7.00 as did the "technical knowledge/competencies" statement "be knowledgeable in all rules and regulations of the game." These two statements ranked fifth as valued by the athletes.

The 10 highest ranking statements included four statements from the dimension of "technical knowledge/competencies," three statements from the "personality traits" dimension, two statements from the dimension "philosophical commitments" and one statement from the dimension "general mannerisms."

#### Least Valued Expectations

The lowest ranking statement, "View winning as everything," had a mean score of only 1.16. This statement was representative

of the dimension "philosophical commitments." The next four lowest ranking statements were all representative of the dimension "general mannerisms." They were "swear occasionally in the heat of a game," with a mean score of 1.69; "show anger when team makes mistakes," the mean score which was 1.76; "wear school colors during competitive events" which yielded a mean score of 2.29; and "show displeasure with officials if they make mistakes," for which a mean score of 2.34 was obtained. Of the 10 lowest ranked statements, seven were of the dimension "general mannerisms" and one each from the other three dimensions: "personality traits," "philosophical commitments," and "technical knowledges/competencies."

#### The Four Coaching Dimensions

The analysis of data in relation to the four dimensions of coaching style also involved the computation of mean scores. The mean scores for each of the four dimensions are presented in Table 3. Refer back to page 58.

"Technical knowledges/competencies" ranked highest among the four dimensions of coaching with a mean score of 5.59. "Personality traits" was second highest. The obtained mean for the 15 statements comprising this category was 5.52. The "philosophical commitments" dimension yielded a mean score of 5.07. "General mannerisms" dimension had the lowest mean value, 3.83.

A simple one way analysis of variance was computed to ascertain if there were any significant differences among the means of the four dimensions of coaching style. The analysis of variance

summary is presented in Table 5. The "F" was computed to be 4.08 which was significant at the .05 level of confidence.

The Newman-Keuls Technique was employed to ascertain where the differences existed. Table 5 illustrates the chart and findings of the Newman-Keuls procedure suggested. The information may be summarized schematically as follows:

GM	PC	PT	TKC
1	3	2	4

—                      —

This analysis indicates that the differences are between groups 1 and 2, 1 and 3, and 1 and 4. The groups underlined by a common line do not differ from each other. Groups not underlined by a common line do differ. The differences, then, were found to be between the dimension "general mannerisms" and the dimension "philosophical commitments;" between the dimension "general mannerisms" and the dimension "personality traits; and between the dimension "general mannerisms" and the dimension "technical knowledges/competencies."

#### Discussion

The consideration of each athlete's individuality, the essence of Statement #7, was clearly the most highly valued by subjects who participated in this study. Concern for the individual has been a major trend in American society. Recently, this mood has been strongly supported by the humanist movement. In

Table 5

ANOVA Summary and Newman-Keuls Procedure  
(k = 4, n = 15)

Source	SS	df	MS	F
Groups	29.86	3	9.95	4.08
Within	<u>136.38</u>	<u>56</u>	2.44	
Total	166.24	59		$F_{.95}(3,56) = 2.78$
Order.....	1	2	3	4
Groups in order.....	1 G.M.	3 P.C.	2 P.T.	4 T.K.C.

$\Sigma X$	57.51	76.11	82.86	83.89
------------	-------	-------	-------	-------

1	57.51	-----	18.60	25.35	26.38
3	76.11	-----	-----	6.75	7.78
2	82.86	-----	-----	-----	1.03
4	83.89	-----	-----	-----	-----

Truncated range r.....	2	3	4
$q_{.95}(r,56)$ .....	2.83	3.40	3.74
$q_{.95}(r, 56) \sqrt{nMS_{within}}$	17.12	20.57	22.63

C.V.

Group 4 - Group 1 = 26.38	>	22.63	significant
Group 3 - Group 1 = 25.35	>	20.57	significant
Group 2 - Group 1 = 18.60	>	17.12	significant
Group 4 - Group 2 = 7.78	<	20.57	not significant

Note.- k = number of groups       $q_{.95} = .05$  level of significance  
 n = number of scores within groups      r = number of steps two groups are apart on ordered scale  
 X = sum of scores within groups      C.V. = critical value

education, the effects of the tenets of humanism have pervaded curriculum, approaches to teaching and even the organization of schools. The professional woman physical educator who is committed to the appropriateness of the sport experience in contributing to the individual development of her students would find the results of this study strongly in support of her beliefs.

"Instill within her players the belief that winning is great but playing and loving the game is greater" was ranked second by the athletes. These two highest ranked statements were from the "philosophical commitments" dimension. The lowest ranked statement, "View winning as everything" was also from the dimension "philosophical commitments."

The placement of the statement relative to the importance of playing and loving the game as a more valued expectation than winning as second highest of the 60 statements, and viewing winning as everything as lowest, reveals a consistency among respondents. Numerous speculations are proposed as to why this point of view may exist among women collegiate athletes. First and foremost, it may be an artifact of the years and years of female school sport leaders' focus on participation for all, rather than winning. In effect, this idea, expressed by the athletes, might be related to the concerns among responsible coaches and teachers of physical education that there are inherent evils in men's athletics. Another explanation for this strong finding is, of course, that inter-collegiate women athletes do, in reality, value their playing and competitive experiences more than they do the outcomes.



Statements least valued by the athletes were heavily representative of the "general mannerisms" dimension. These statements involved such effects as appearance, language, habits, and other observable behaviors. The lack of value placed on overt behaviors reflects another trend in American society. Emphasis no longer seems to be placed on outward appearance or actions. This is, after all, an era of allowing people to "do their own thing." The worth of the individual is dependent upon his or her inner self and how the individual relates to others.

The four dimensions of coaching style were significantly different only in terms of the "general mannerisms" dimension. This category was different than the other three dimensions, "personality traits," "philosophical commitments," and "technical knowledges/competencies." No other significant differences were found.

Two explanations are offered relative to this finding. First, the statements comprising the "general mannerisms" dimension were extremely "general." This was a conglomerate category that did not identify distinctive attributes. Certain statements included in the "general mannerisms" dimension might have overlapped with the other dimensions. For example, the highest ranking statement of this dimension, "exhibit enthusiasm," could be deemed representative of the category "personality traits" since enthusiasm could be viewed as part of the coach's personality. But at the same time, one could consider this to be a "philosophical commitment" in that the amount of enthusiasm exhibited by the coach, when and how, is a by-product of the coach's philosophy.



In other words, the "general mannerisms" statements cannot be considered as a separate entity, specific in its meanings like technical knowledges or personality traits.

A second explanation for the comparative low value placed on "general mannerisms" could be related to the current trend in American society de-emphasizing the role of appearance, language, and habits. A person's worth is measured by more than overt behaviors.

In summary, the study offers the suggestion that leadership is viewed as a totality. In terms of expectations of the athlete, there are probably some compromises made by players in considering their coach's leadership. A sportswoman responsible for directing a team may be limited in technical knowledge but she may be effective because her personality is acceptable or because the fundamental beliefs, her philosophical commitments, that guide her behaviors are compatible with those of her athletes.

## CHAPTER V

## SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

SummaryPurpose

The purpose of this investigation was to explore women athletes' expectations for the leadership to which they were exposed in intercollegiate competitive sports. A further purpose of the study was to determine the relative value athletes placed on various aspects of coaching style. Specifically, the investigation sought to answer the following questions:

1. What are the most valued expectations athletes have in regard to the coaching they experience?
2. What are the least valued expectations athletes have in regard to the coaching they experience?
3. What differences, if any, are there among athletes' values of four dimensions of coaching: general mannerisms, personality traits, philosophical commitments, and technical knowledges/competencies?

Procedures

Review of literature. The review of related literature involved three main areas: the changing role of women in sport, coaching, and the Q-sort technique.

The changing role of women in sport in America was focused upon from a historical view. The literature suggests that the American sportswoman is a twentieth century phenomenon (Ulrich, 1960; Coffey, 1965; Kafas and Lyon, 1973; Miller, 1974). Although women have long been involved in physical activity, the competitive sport experience for women has merged in the twentieth century. During this century, the changing role of women in sport has been directly related to the changing role of women in American society (Coffey, 1965; Sheriff, 1971).

Physiological misconceptions were found to be strong deterrents for women pursuing sport. These misconceptions have been medically researched and thus, rectified. Research has produced no evidence that vigorous physical activity has any harmful effect upon menstruation, fertility, or childbirth (Harris, 1973; Thomas, 1971).

Culturally determined sex roles have also influenced the sport pursuits of many women. The "feminine image" as defined by the American culture has been the antithesis of the active sportswoman. Because so-called male traits are required for successful sport participation, sport has been said to "masculinize women." The active woman in sport has often been termed "jock" or "Amazon." Many women have preferred to avoid endangering their feminine image (Harris, 1974).

Femininity is defined by the culture in which it exists. The current trend in American society is the de-emphasization of the differences between the sexes. The aggressive, assertive woman

is now taking her place in society along side of her male counterpart. Sport is no longer strictly "masculine territory."

The current trend in intercollegiate competition involves rapid growth of programs. Title IX of the Education Amendments of 1972 is the legal mandate requiring equality for the sexes in all facets of the educational institution. Specifically, Title IX covers athletics and insists that institutions provide equitable budgets, facilities, coaches, equipment travel allowances, athletic scholarships, scheduling, etc., for women as well as men. This mandate will assure women an equal place on the athletic fields and playing courts of our educational institutions.

The more highly competitive intercollegiate sport programs for women evolving today will demand an especially high caliber of leadership. The literature pertaining to coaching is primarily concerned with the male coach. Attributes of the successful male coach are, in general, desirable traits for the woman coach (Neal, 1969). Certain characteristics and personality traits have been identified as valuable for coaches to possess. The concept of "ideal coach" has not been developed fully. Most of the literature involving women in coaching emphasized the need for more highly qualified coaches (Hartman, 1968; Neal, 1969; Spasoff, 1971; Miller, 1974).

The Q-sort technique involves the sorting of statements according to the importance of each statement to the individual. The technique has provided both favorable and unfavorable reactions. Most of the criticism involves the loss of scatter and elevation

with the use of the forced-sort distribution. Advantages of the Q-sorting technique are numerous. Kerlinger (1956) found the greatest advantage to be in the studying of attitudes and values. Seeman and Raskin (1953) cited the Q-sorting procedure's ability to secure a large number of ratings that can be compared from person to person as its greatest asset. Livson and Nichols (1956) found the major advantage to be that the individual provides his or her own frame of reference.

Construction and refinement of the Q-sort. Expectations for coaching behavior were obtained from women intercollegiate athletes at The University of North Carolina at Greensboro. These expectations, along with those found through a review of the literature concerning coaching, were then refined, organized and developed into 83 Q-sort statements. These original statements were categorized into the four dimensions of coaching style by seven judges. The judges consisted of two student athletes, two practicing female collegiate coaches, two professionally trained leaders concerned with the current sport movement who were also coaches, and one professional woman athlete who is now a coach.

The final 60 statements were randomly numbered and typed on plain, white 3 x 5 cards. A biographical information sheet, direction sheet, and answer sheet were prepared for test administration.

Selection of subjects and data gathering. Subjects included 120 women intercollegiate athletes representing colleges and universities in the state of North Carolina. Test administration and data collection were carried out by the investigator.

Analysis of data. Analysis of data in this investigation involved the following statistical procedures: (1) computation of mean scores for each statement and the ranking of the statement, (2) computation of mean scores for each of the four dimensions of coaching style, (3) analysis of variance to determine if significant differences existed between the four dimensions of coaching, (4) the Newman-Keuls statistical technique to determine where the significant differences existed.

### Conclusions

Expectations of women intercollegiate athletes regarding the coaching they receive were explored in this study by the Q-sort technique. Data permit the following answers to questions that frame this investigation. It must be noted, however, that the answers to the questions are limited to those responses provided for the subjects by the investigator in the form of Q-statements.

1. What are the most valued expectations athletes have in regard to the coaching they experience?

The consideration of each athlete's individuality, the essence of Statement #7, was valued most by the athletes. "Instill within her players the belief that winning is great but playing and loving the game is greater," was ranked second by the athletes. These two highest ranked statements were representative of the "philosophical commitments" dimension of coaching style. The third "most valued" statement was "exhibit enthusiasm,"



purportedly a "general mannerisms" statement. "Provide constructive criticism in order to assist players in improving," a "technical knowledge/competencies" statement, was ranked fourth by the respondents. Both the "personality trait" statement, "be honest," and the "technical knowledges/competencies" statement, "be knowledgeable in all rules and regulations of the game," were valued equally by the athletes and ranked 5.5.

The 10 "most valued" statements included four statements representative of the "technical knowledges/competencies" dimension, three statements referred to as "personality traits," two statements from the dimension "philosophical commitments," and one "general mannerisms" statement.

2. What are the least valued expectations athletes have in regard to the coaching they experience?

The "least valued" expectation the athletes had regarding coaching was "view winning as everything," a statement representative of the "philosophical commitments" dimension of coaching style. The next five "least valued" statements were from the dimension "general mannerisms." These statements were: "swear occasionally in the heat of a game," "show anger when team makes mistakes," "wear school colors during competitive events," "show displeasure with officials if they make mistakes," and "be a non-smoker."

The 10 lowest ranked statements included seven statements of the "general mannerisms" dimension of coaching style, and one statement from each of the other three dimensions: "personality

traits," "philosophical commitments," and "technical knowledges/competencies."

3. What differences, if any, are there among athletes' values of four dimensions of coaching: general mannerisms, personality traits, philosophical commitments, and technical knowledges?

The dimension "technical knowledges/competencies" was valued most by the athletes. "Personality traits" was ranked second, followed by "philosophical commitments" and "general mannerisms," in that order. Analysis of variance suggested that a significant difference did exist between the four dimensions. The Newman-Keuls statistical technique revealed that the differences existed between the dimension "general mannerisms" and "personality traits," between "general mannerisms" and "philosophical commitments," and between "general mannerisms" and "technical knowledges/competencies." The significant difference, then, existed between the "general mannerisms" dimension and each of the other three dimensions. No other significant differences existed.

The ranked statements according to the values placed on them by the 120 athletes represents a hierarchy of behavioral traits for coaches to possess. Specifically, athletes valued most the coach's consideration of each athlete as an individual. The athletes valued least the coach's view that winning is everything. Generally, athletes valued the coach's knowledge of all aspects of her sport. Athletes did not place high priority on the coach's "general mannerisms."

## Recommendations

### Research

Additional research is needed concerning the woman coach. Defining the role of the coach will aid both the athlete and the coach. It is important for the coach to know how she is perceived by her athletes and what is expected of her. Such knowledge could enhance player-coach interactions and increased understandings among sportswomen.

Future studies involving the use of the Q-sort instrument would be worthwhile. The investigator recommends the use of the present test to study the expectations of male intercollegiate athletes as well as female high school athletes and professional women athletes. This would provide an extension of what we know both within and across sexes. It might also give insights into differences that might exist at various levels of competition.

It is recommended that the dimension "general mannerisms" be eliminated. Possibly only three dimensions of coaching style, i.e., personality traits, philosophical commitments, and technical knowledges/competencies, could be investigated.

### Practice

Coaches could use the present test before their seasons begin to ascertain the expectations their athletes have for coaching behavior. Such approaches to leadership have the potential to further enrich the competitive sport experience for women.

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## APPENDIXES

March 25, 1914

The Honorable Secretary of Education

Washington, D. C.

Dear Sir: In reply to the communication of your letter of the 12th inst. regarding the proposed bill for the purpose of the Department of Education to establish a National Board of Education, I have the honor to acknowledge the receipt of your letter of the 12th inst. and to inform you that the same has been forwarded to the proper authorities for their consideration.

The Department of Education is very much interested in all matters relating to the education of the people and is particularly interested in the proposed bill for the purpose of the Department of Education to establish a National Board of Education. It is the policy of the Department to encourage the people to take an active part in the government of the country and to make the government more efficient and more responsive to the needs of the people. It is the belief of the Department that the proposed bill will be of great benefit to the people and will be a step in the right direction.

## APPENDIX A

## Correspondence

I have the honor to acknowledge the receipt of your letter of the 12th inst. regarding the proposed bill for the purpose of the Department of Education to establish a National Board of Education. It is the policy of the Department to encourage the people to take an active part in the government of the country and to make the government more efficient and more responsive to the needs of the people. It is the belief of the Department that the proposed bill will be of great benefit to the people and will be a step in the right direction.

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March 23, 1974

Dear \_\_\_\_\_,

Your cooperation is sought in an investigation of women inter-collegiate athletes' expectations of coaching behavior. The study is being conducted in partial fulfillment for the requirements of the degree of Master of Science in Physical Education at the University of North Carolina at Greensboro.

The research tool will be a Q-sort which is comprised of 60 phrases to be arranged by the athlete in a prescribed manner. Due to the nature of the tool it is necessary that I administer it. My purpose in writing is to involve your athletes in my study. If you agree, I will travel to your school and "use" approximately 45 minutes of your athletes' time. I seek your help in arranging a time and suitable place for test administration. The only stipulation for the participant is that she has competed on a varsity team representing your university during the 1973-74 academic year. I will be prepared to work with 30 players at one time.

I have enclosed a postcard for your immediate reply. This will be followed up by a personal phone call to set up a test date and to answer questions you might have. Tentatively, testing will be carried out April 22 through April 26 and April 29 through May 3. Please consider these two weeks and talk with your students as to the best time for them. We will discuss this further when I contact you.

I hope you will encourage your athletes to participate and contribute to the growing knowledge and information about women in sport. The Q-sort is a fun tool to work with and the topic should be of great interest to them. Your assistance will be greatly appreciated.

Thank you,

Peggy Martin

## ENCLOSED SELF-ADDRESSED POST CARD

NAME OF COLLEGE

\_\_\_\_ Yes, our athletes will participate in the study.

\_\_\_\_ No, we will be unable to participate.

\_\_\_\_\_ School phone

\_\_\_\_\_ Home phone

Signed \_\_\_\_\_  
(Coach)



## APPENDIX B

## Selection and Refinement of Instrument

Directions to Judges: The following statements purportedly represent athlete expectations regarding coaching behavior. For purposes of this investigation, coaching behavior is operationally defined in four main categories:

1. General Mannerisms refer to habits and other overt behaviors perceptible in a variety of coaching situations.
2. Personality Traits refer to the relatively permanent and broad behavioral reaction tendencies which represent behavior and generalized feelings or responses (Singer, 1972).
3. Philosophical Commitments refer to the underlying beliefs and principles which guide the coach in structuring the athletic environment and in interacting with players.
4. Technical Knowledges/Competencies refer to those dimensions of coaching which consist of the coach's understanding of rules, strategies, plays, etc., of the game and the way in which these are implemented.

Your task is to judge the appropriateness of the statements for each category. First, read each statement carefully, then, using the numbers adjacent to each definition above, assign a category to each statement. Place the number in the margin to the left of the statement. If, in your opinion, the statement is not connotive of any of the categories as defined, place an X in the margin. Hopefully, this designation will not have to be used frequently.

Thank you for your help in this undertaking.

## ORIGINAL 83 STATEMENTS PRESENTED TO JUDGES

1. Communicate expectations to players.
2. Maintain her composure during game.
3. Be outgoing.
4. Be skilled in her sport.
5. Identify goals held for the team.
6. Show displeasure with officials if they make mistakes.
7. Instill within players the belief that winning is great but playing and loving the game is greater.
8. Be friendly.
9. Be able to recognize and correct faulty skill execution.
10. Cause players to strive to develop their character.
11. Be exemplary on and off the court.
12. Develop athlete's desire to win.
13. Exhibit enthusiasm.
14. Demonstrate knowledge of game strategies and apply them in different game situations.
15. Help players understand the importance of winning.
16. Actively participate in practice sessions.
17. Be intellectual.
18. Conduct highly organized practice sessions.
19. Give team members an opportunity to play in every game.
20. Dress stylishly for games.
21. Be a well-rounded individual.
22. View competition as learning experiences.
23. Make physical demands on team members during practice sessions.
24. View academics as first priority for players.
25. Dress appropriately for practice sessions.
26. Be openminded.
27. Be knowledgeable in all rules and regulations of the game.
28. Require players to display proper conduct while playing or sitting on the bench.
29. Utilize the latest conditioning and training techniques.
30. Be sensitive.
31. Swear occasionally in the heat of a game.
32. Substitute as much as possible to allow for game experience.
33. Replace an athlete who appears injured or displays undesirable behavior.
34. Begin and end practice sessions on time.
35. Be patient.
36. Dress neatly.
37. Maintain discipline.
38. Be dedicated.
39. Expect players to look and act like ladies at all times.
40. Refrain from vulgarities.
41. Know how to deal with athletic injuries.
42. Maintain a low key manner in tense situations.
43. View winning as everything.
44. Articulate ideas clearly and interestingly.

45. Be knowledgeable in the physiological factors pertaining to rehabilitation of the injured athlete.
46. Possess a sense of humor.
47. Abide by team rules and regulations set forth for all team members to follow.
48. Consider each athlete as an individual.
49. Use game-like practice drills.
50. Strive to win through skill and good team play and not through cheating and dirty play.
51. Be honest.
52. Never smoke in front of players.
53. Be understanding.
54. Show anger when team makes mistakes.
55. Make definitive effort to know each team member as an individual.
56. Respect personhood above athletic ability.
57. Be a rated official.
58. Express confidence in her players when deserved.
59. Be dynamic.
60. Show pride in team and their accomplishments.
61. Be a non-smoker.
62. Participate in team meetings and encourage players observations and gripes to be aired.
63. Be knowledgeable about the psychological aspects of sport participation.
64. Consult team members with regard to scheduling of opponents.
65. Be dominant.
66. Be ready to listen and discuss personal problems of all the athletes who make up the team.
67. Argue for team in instances that are questionable.
68. Express pleasure as well as displeasure.
69. Consult team members concerning the length and number of practice sessions.
70. Publicly praise individual team members through the news media.
71. Be sincere.
72. Allow players to determine their own team rules and regulations.
73. Provide immediate feedback or knowledge of results concerning performance when taken from game.
74. Be fair.
75. Provide constructive criticism in order to assist players in improving.
76. Be extroverted.
77. Allow team members to choose their own leaders or captains.
78. Be happy-go-lucky.
79. Never be too busy for all team members.
80. Post individual and team statistics regularly.
81. Prepare the team mentally for competition.
82. Publicly praise good team performance through the news media.
83. Wear school colors at competitive events.

## FINAL 60 STATEMENTS \*

1. Be outgoing.
2. Be dynamic.
3. Show displeasure with officials if they make mistakes.
4. View academics as first priority for players.
5. Make physical demands on team members during practice sessions.
6. Be knowledgeable in the physiological factors pertaining to the rehabilitation of the injured athlete.
7. Consider each athlete as an individual.
8. Conduct highly organized practice sessions.
9. Actively participate in practice sessions.
10. View winning as everything.
11. Be exemplary on and off the court.
12. Demonstrate knowledges of game strategies and apply them in different game situations.
13. Be dominant.
14. Be able to recognize and correct faulty skill execution.
15. Dress stylishly for games.
16. Help players understand the importance of winning.
17. Exhibit enthusiasm.
18. Allow team members to choose their own leaders or captains.
19. Refrain from vulgarities.
20. Be a rated official.
21. Be knowledgeable about the psychological aspects of sport participation.
22. Be understanding.
23. Be knowledgeable in all rules and regulations of the game.
24. Be sensitive.
25. Require players to display proper conduct while playing or sitting on the bench.
26. Possess a sense of humor.
27. Instill within her players the belief that winning is great but playing and loving the game is greater.
28. Consult team members with regard to scheduling of opponents.
29. Be a well-rounded individual.
30. Dress neatly.
31. Maintain her composure during game.
32. Respect personhood above athletic ability.
33. Provide immediate feedback or knowledge of results concerning performance when taken from game.
34. Be openminded.
35. Expect players to look and act like ladies at all times.
36. Be honest.
37. Be skilled in her sport.
38. Provide constructive criticism in order to assist players in improving.
39. Be intellectual.
40. Swear occasionally in the heat of a game.

41. Be a non-smoker.
42. Identify goals held for the team.
43. Use game-like practice drills.
44. Express pleasure as well as displeasure.
45. Cause players to strive to develop their character.
46. Give team members an opportunity to play in every game.
47. Be sincere.
48. Be friendly.
49. Utilize the latest conditioning and training techniques.
50. Be fair.
51. Be happy-go-lucky.
52. Dress appropriately for practice sessions.
53. Be patient.
54. Know how to deal with athletic injuries.
55. Maintain a low key manner in tense situations.
56. Allow players to determine their own rules and regulations.
57. Wear school colors during competitive events.
58. Show anger when team makes mistakes.
59. Never smoke in front of players.
60. Replace an athlete who appears injured or displays undesirable behavior.

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\*These statements were evaluated as representative of their categories by at least five of the seven judges. Some statements were drawn at random from a larger pool of items acceptable to the judges.



FINAL 60 STATEMENTS CATEGORIZED INTO FOUR  
DIMENSIONS OF COACHING

GENERAL MANNERISMS

3. Show displeasure with officials if they make mistakes.
11. Be exemplary on and off the court.
15. Dress stylishly for games.
17. Exhibit enthusiasm.
19. Refrain from vulgarities.
30. Dress neatly.
31. Maintain her composure during game.
40. Swear occasionally in the heat of a game.
41. Be a non-smoker.
44. Express pleasure as well as displeasure.
52. Dress appropriately for practice sessions.
55. Maintain a low key manner in tense situations.
57. Wear school colors during competitive events.
58. Show anger when team makes mistakes.
59. Never smoke in front of players.

PERSONALITY TRAITS

1. Be outgoing.
2. Be dynamic.
13. Be dominant.
22. Be understanding.
24. Be sensitive.
26. Possess a sense of humor.
29. Be a well-rounded individual.
34. Be openminded.
36. Be honest.
39. Be intellectual.
47. Be sincere.
48. Be friendly.
50. Be fair.
51. Be happy-go-lucky.
53. Be patient.

PHILOSOPHICAL COMMITMENTS

4. View academics as first priority for players.
7. Consider each athlete as an individual.
10. View winning as everything.
16. Help players understand the importance of winning.
18. Allow team members to choose their own captains.
25. Require players to display proper conduct while playing or sitting on the bench.

27. Instill within her players the belief that winning is great but playing and loving the game is greater.
28. Consult team members with regard to scheduling of opponents.
32. Respect personhood above athletic ability.
35. Expect players to look and act like ladies at all times.
42. Identify goals held for the team.
45. Cause players to strive to develop their character.
46. Give team members an opportunity to play in every game.
56. Allow players to determine their own team rules and regulations.
60. Replace an athlete who appears injured.

#### TECHNICAL KNOWLEDGES/COMPETENCIES

5. Make physical demands on team members during practice sessions.
6. Be knowledgeable in the physiological factors pertaining to the rehabilitation of the injured athlete.
8. Conduct highly organized practice sessions.
9. Actively participate in practice sessions.
12. Demonstrate knowledges of game strategies and apply them in different game situations.
14. Be able to recognize and correct faulty skill execution.
20. Be a rated official.
21. Be knowledgeable about the psychological aspects of sport participation.
23. Be knowledgeable in all rules and regulations of the game.
33. Provide immediate feedback or knowledge of results concerning performance when taken from game.
37. Be skilled in her sport.
38. Provide constructive criticism in order to assist players in improving.
43. Use game-like practice drills.
49. Utilize the latest conditioning and training techniques.
54. Know how to deal with athletic injuries.

## APPENDIX C

## Test Administration Materials

## GENERAL BIOGRAPHICAL INFORMATION

The purpose of this questionnaire is to gather background information about individuals who take part in this investigation.

1. NAME \_\_\_\_\_
2. COLLEGE \_\_\_\_\_
3. MAJOR FIELD OF STUDY \_\_\_\_\_
4. CLASS: \_\_\_\_ Freshman, \_\_\_\_ Sophomore, \_\_\_\_ Junior, \_\_\_\_ Senior
5. AGE (years): \_\_\_\_\_
6. G.P.A. (overall):     \_\_\_\_ 4.0     \_\_\_\_ 3.0-3.4     \_\_\_\_ 2.0-2.4  
                             \_\_\_\_ 3.5-3.9     \_\_\_\_ 2.5-2.9     \_\_\_\_ 1.5-1.9
7. In which of the following sports did you participate in as a varsity team member during the 1973-74 school term?

- \_\_\_\_\_ Badminton
- \_\_\_\_\_ Basketball
- \_\_\_\_\_ Bowling
- \_\_\_\_\_ Diving
- \_\_\_\_\_ Field Hockey
- \_\_\_\_\_ Golf
- \_\_\_\_\_ Gymnastics
- \_\_\_\_\_ Softball
- \_\_\_\_\_ Swimming
- \_\_\_\_\_ Tennis
- \_\_\_\_\_ Track and Field
- \_\_\_\_\_ Volleyball
- \_\_\_\_\_ Other (Specify) \_\_\_\_\_

8. What is your varsity sport preference? \_\_\_\_\_

## DIRECTIONS\*

You have a set of 60 cards, a diagram of "boxes" and a pencil. On each card there is a phrase depicting coaching behavior. Your task is to sort these statements according to the way you value that aspect of coaching behavior. In other words, you are to arrange the 60 statements placing those you consider to be the most valuable aspects of the coach's behavior at the left end of the diagram; those that are least valued at the right end and the remainder falling somewhere in between.

The sort diagram contains 60 boxes organized in 11 columns. In the extreme left column, A, record the numbers of the two behaviors that you value most; in Column B, the three behaviors that are, in your judgement, next valued by you, Column C, next valued by you, etc. Do not use the same number twice. When you have completed the sorting, there will be a number in each box of the diagram.

There is no time limit. You are encouraged to take as much time as you need to give a thoughtful response. There are no "right" or "wrong" answers. When finished, the sort will represent your perceptions - obviously based on your own experience.

There is no special way to go about sorting. One suggested way is to first read each card and decide whether the statement is valued or not. Place most valued cards on the left; least valued cards on the right; un-decided in the middle. Then, find the one card in the left stack that is MOST VALUED by you and set it aside. Do the same with the second Most Valued statement. Then, switch over to the Least Valued statements and locate the cards that will be represented in Column K on the diagram. Go through the un-decided and place them right or left after a "second thought." Then identify three statements for Column B and three for Column J. Continue the process working from each until you have sorted all the cards. When you are confident about your arrangement, record the statement numbers in the appropriate box on the diagram.

Be certain that your name (real or fictitious - whichever you elect to use) is on the diagram at the top right. This name must "match" the one you used on the personal data cover sheet.

Please return all cards, diagrams, pencils.

---

\*These directions were supplemented by the researcher's comments. Respondents questions were answered. It was pointed out that judgements about "most" and "least" were comparative--not absolute.

## ANSWER SHEET

Name \_\_\_\_\_

MOST

LEAST

valued

valued

[illegible]



## BIOGRAPHICAL INFORMATION

<u>Subject</u>		<u>Class Standing</u>	
Appalachian College	= 18	Freshman	= 47
Catawba College	= 3	Sophomores	= 34
Elon College	= 13	Juniors	= 33
High Point College	= 18	Seniors	= 21
Pease College	= 16		<u>130</u>
University of North Carolina, Greensboro	= 48		
	<u>130 Total</u>		

<u>Major</u>		<u>Sex</u>	
Art	= 1	Male	= 17
Business	= 1	Female	= 33
Education	= 2		
Engineering	= 3		
Health	= 1		
Liberal Arts	= 1		
Math	= 1		
Medical Technology	= 1		
Nursing	= 2		
Physical Education	= 1		
Political Science	= 1		
Psychology	= 1		
Religion	= 1		
Social Work	= 1		
Unemployed	= 4		

## APPENDIX D

## Subjects Biographical Information

Grade Point Average

4.0	= 9
3.5 - 3.9	= 8
3.0 - 3.4	= 30
2.5 - 2.9	= 50
2.0 - 2.4	= 23
1.5 - 1.9	= 1

The instances where total numbers appear to be inconsistent are due to the fact that the total number of subjects is 130, and the total number of subjects is 130. The total number of subjects is 130, and the total number of subjects is 130.

## BIOGRAPHICAL INFORMATION\*

<u>Subjects</u>		<u>Class Standing</u>	
Campbell College	= 14	Freshman	= 42
Catawba College	= 9	Sophomores	= 34
Elon College	= 15	Juniors	= 33
High Point College	= 18	Seniors	= 21
Peace College	= 16		<u>120</u>
University of North Carolina, Greensboro	= <u>48</u>		
	120 Total		
<u>Academic Major</u>		<u>Age</u>	
Art	= 1	18	= 17
Banking	= 1	19	= 33
Biology	= 2	20	= 34
Business	= 5	21	= 23
Chemistry	= 1	22	= 11
Early Childhood		23	= 1
Education	= 2	32	= 1
Elementary Education	= 2		
English	= 1		
Geology	= 1		
Health	= 1		
History	= 1		
Home Economics	= 2		
Journalism	= 2		
Liberal Arts	= 1		
Math	= 1		
Medical Technology	= 1		
Nursing	= 2		
Physical Education	= 78		
Political Science	= 1		
Recreation	= 3		
Special Education	= 1		
Speech	= 1		
Sociology	= 5		
Undecided	= 4		
		<u>Grade Point Average</u>	
		4.0	= 0
		3.5 - 3.9	= 8
		3.0 - 3.4	= 30
		2.5 - 2.9	= 58
		2.0 - 2.4	= 23
		1.5 - 1.9	= 1

\*In instances where total numbers appear to be inconsistent with N = 120 subjects, the reader is reminded that subjects were given the option of leaving portions of the form blank.

BIOGRAPHICAL INFORMATION  
(Continued)

Sport Participated in:

1 sport = 81 subjects  
2 sports = 27 subjects  
3 sports = 12 subjects

Sport Preferred:

Basketball = 40  
Field Hockey = 24  
Golf = 4  
Softball = 4  
Swimming = 8  
Tennis = 21  
Volleyball = 19

Team Membership in:

Basketball = 45  
Field Hockey = 35  
Golf = 6  
Softball = 8  
Swimming = 8  
Tennis = 23  
Volleyball = 29



OBTAINED MEANS FOR 60 STATEMENTS  
AS RANKED BY SUBJECTS

<u>Statement Number</u>	<u>Mean</u>
7. Consider each athlete as an individual.	8.69
27. Instill within her players the belief that winning is great but playing and loving the game is greater.	8.15
17. Exhibit enthusiasm.	7.20
38. Provide constructive criticism in order to assist players in improving.	7.19
36. Be honest.	7.00
23. Be knowledgeable in all rules and regulations of the game.	7.00
22. Be understanding.	6.97
50. Be fair.	6.85
12. Demonstrate knowledges of game strategies and apply them in different game situations.	6.85
14. Be able to recognize and correct faulty skill execution.	6.78
45. Cause players to strive to develop their character.	6.53
53. Be patient.	6.44
47. Be sincere.	6.35
34. Be openminded.	6.17
21. Be knowledgeable about the psychological aspects of sport participation.	6.16
26. Possess a sense of humor.	6.05
48. Be friendly.	5.97
25. Require players to display proper conduct while playing or sitting on the bench.	5.97
54. Know how to deal with athletic injuries.	5.93
44. Express pleasure as well as displeasure.	5.91
42. Identify goals held for the team.	5.85
32. Respect personhood above athletic ability.	5.85
31. Maintain her composure during game.	5.76
11. Be exemplary on and off the court.	5.62
29. Be a well-rounded individual.	5.59
43. Use game-like practice drills.	5.54
6. Be knowledgeable in the physiological factors pertaining to the rehabilitation of the injured athlete.	5.52
60. Replace an athlete who appears injured or displays undesirable behavior.	5.52
5. Make physical demands on team members during practice sessions.	5.40
33. Provide immediate feedback or knowledge of results concerning performance when taken from game.	5.35

<u>Statement Number</u>	<u>Mean</u>
1. Be outgoing.	5.28
8. Conduct highly organized practice sessions.	5.23
24. Be sensitive.	5.20
18. Allow team members to choose their own leaders or captains.	5.12
37. Be skilled in her sport.	4.99
2. Be dynamic.	4.82
19. Refrain from vulgarities.	4.74
49. Utilize the latest conditioning and training techniques.	4.63
9. Actively participate in practice sessions.	4.60
4. View academics as first priority for players.	4.60
30. Dress neatly.	4.42
55. Maintain a low key manner in tense situations.	4.30
16. Help players understand the importance of winning.	4.28
35. Expect players to look and act like ladies at all times.	4.20
39. Be intellectual.	3.95
13. Be dominant.	3.66
56. Allow players to determine their own rules and regulations.	3.60
46. Give team members an opportunity to play in every game.	3.45
52. Dress appropriately for practice sessions.	3.29
28. Consult team members with regard to scheduling of opponents.	3.14
15. Dress stylishly for games.	2.92
59. Never smoke in front of players.	2.75
20. Be a rated official.	2.72
51. Be happy-go-lucky.	2.56
41. Be a non-smoker.	2.52
3. Show displeasure with officials if they make mistakes.	2.34
57. Wear school colors during competitive events.	2.29
58. Show anger when team makes mistakes.	1.76
40. Swear occasionally in the heat of a game.	1.69
10. View winning as everything.	1.16



## APPENDIX F

## Statistical Formulas Used in Analysis

## STATISTICAL FORMULAS

1. Analysis of Variance Formulas<sup>1</sup>

The method for computation of analysis of variance is summarized as follows:

Sum of Squares

$$\text{For total } S.S._t = \sum X^2 - \frac{(\sum X)^2}{N}$$

where  $X$  = score and  $N$  = number of cases

$$\text{For groups } S.S._g = \frac{(\sum X_1)^2}{k_1} + \frac{(\sum X_2)^2}{k_2} \dots \frac{(\sum X_m)^2}{k_m} - \frac{(\sum X)^2}{N}$$

where  $\sum X_1, \sum X_m$ , etc. = total score for any group

$\sum k_1, \sum k_m$ , etc. = number of statements per group

$$\text{For within } S.S._w = (S.S._t - S.S._g)$$

Mean Square Values

These values are obtained by dividing the sum of squares by the corresponding degrees of freedom (df):

$$\text{For total } df_t = (N-1)$$

$$\text{For groups } df_g = (\text{total number of groups} - 1)$$

$$\text{For within } df_w = (df_t - df_g)$$

F-Value

$$F = \frac{\text{Group mean square}}{\text{Within mean square}}$$

---

<sup>1</sup>James E. Wert, Charles O. Neidt, and J. Stanley Ahmann, Statistical Methods in Educational and Psychological Research (New York: Appleton-Century-Crofts, Inc., 1954), pp. 172-177.

2. Newman-Keuls Formula<sup>2</sup>

$$q_{.95} (r, f) \sqrt{nMS_{\text{within}}} = \text{C.V.}$$

Note.-

$r$  = number of steps two groups are apart  
on ordered scale

$f$  = degrees of freedom within

$MS_{\text{within}}$  = mean square within

C.V. = critical value

$q_{.95}$  = .05 level of confidence

---

<sup>2</sup>B. J. Winer, Statistical Principles in Experimental Design (New York: McGraw-Hill, 1962), pp. 80-82.

## NUMERICAL COMPARISON OF SECTION DATA

1.	21.	41.
2.	22.	42.
3.	23.	43.
4.	24.	44.
5.	25.	45.
6.	26.	46.
7.	27.	47.
8.	28.	48.
9.	29.	49.
10.	30.	50.
11.	31.	51.
12.	32.	52.
13.	33.	53.
14.	34.	54.
15.	35.	55.
16.	36.	56.
17.	37.	57.
18.	38.	58.
19.	39.	59.
20.	40.	60.

## APPENDIX G

## Raw Data

## NUMERICAL CONVERSION OF 60-ITEM SORTS

		# _____
1. _____	21. _____	41. _____
2. _____	22. _____	42. _____
3. _____	23. _____	43. _____
4. _____	24. _____	44. _____
5. _____	25. _____	45. _____
6. _____	26. _____	46. _____
7. _____	27. _____	47. _____
8. _____	28. _____	48. _____
9. _____	29. _____	49. _____
10. _____	30. _____	50. _____
11. _____	31. _____	51. _____
12. _____	32. _____	52. _____
13. _____	33. _____	53. _____
14. _____	34. _____	54. _____
15. _____	35. _____	55. _____
16. _____	36. _____	56. _____
17. _____	37. _____	57. _____
18. _____	38. _____	58. _____
19. _____	39. _____	59. _____
20. _____	40. _____	60. _____

## MEAN DATA ACCORDING TO COACHING DIMENSION

Sub- ject Num- ber	G.M.	P.T.	P.C.	T.K. /C.	Sub- ject Num- ber	G.M.	P.T.	P.C.	T.K. /C.
1	4.00	6.00	4.33	5.66	36	4.26	5.86	4.40	5.93
2	3.46	5.40	5.06	6.06	37	3.46	6.06	4.73	5.73
3	3.40	5.73	4.73	6.06	38	3.66	4.80	4.93	6.60
4	4.46	4.33	5.06	6.13	39	3.20	5.13	5.93	5.73
5	4.06	6.93	4.53	4.46	40	4.13	5.20	4.93	5.46
6	3.93	4.66	5.93	5.46	41	3.60	6.26	4.13	6.00
7	4.06	5.80	5.13	5.00	42	3.80	5.73	4.40	6.06
8	3.73	6.20	4.20	5.40	43	4.26	5.06	5.20	5.46
9	4.26	4.86	6.33	4.53	44	3.93	5.73	4.13	6.13
10	3.40	4.73	4.93	6.93	45	3.80	5.06	5.20	5.66
11	4.06	6.20	4.26	5.46	46	3.26	5.66	5.66	5.40
12	3.60	5.80	5.06	5.53	47	3.33	6.33	4.86	5.46
13	4.20	5.46	4.66	5.20	48	4.53	5.13	4.46	5.93
14	4.80	5.73	5.26	4.86	49	3.80	5.13	4.53	6.53
15	4.46	5.86	4.53	5.13	50	4.06	5.06	4.40	6.46
16	3.46	5.60	5.20	5.53	51	3.80	5.46	4.73	6.00
17	3.93	5.60	4.60	5.86	52	3.86	6.00	5.26	4.86
18	4.20	4.66	5.60	5.60	53	3.80	6.66	4.80	4.73
19	4.40	5.33	5.66	4.60	54	4.26	6.06	4.26	5.40
20	3.73	5.26	4.73	6.26	55	4.13	7.00	4.46	4.40
21	3.13	4.93	5.66	6.26	56	4.73	5.66	4.73	4.86
22	3.80	4.46	5.60	6.13	57	4.20	4.93	4.73	6.13
23	3.86	5.86	3.93	6.33	58	3.40	5.80	5.20	5.60
24	4.66	4.33	5.93	5.06	59	3.20	6.33	4.66	5.80
25	4.20	5.20	5.33	5.26	60	3.73	5.00	5.00	6.26
26	3.53	4.53	5.86	6.06	61	3.73	5.06	5.06	6.13
27	4.26	5.06	5.40	5.26	62	3.73	5.60	4.80	5.86
28	4.20	5.46	5.00	5.33	63	3.60	5.93	5.40	5.06
29	3.60	6.06	5.06	5.26	64	4.20	5.13	4.53	6.13
30	3.93	4.93	5.06	6.06	65	3.80	6.00	4.33	5.86
31	3.40	5.60	5.60	5.73	66	4.40	4.73	4.40	6.46
32	3.53	5.20	5.46	5.80	67	2.93	5.20	5.46	6.33
33	3.66	5.46	5.40	5.46	68	4.86	4.66	3.80	6.66
34	3.33	5.26	5.60	5.80	69	3.53	4.66	5.00	6.80
35	3.60	5.40	5.86	5.06	70	4.00	5.46	4.86	5.66



## MEAN DATA ACCORDING TO COACHING DIMENSION

Sub- ject Num- ber	G.M.	P.T.	P.C.	T.K. /C.	Sub- ject Num- ber	G.M.	P.T.	P.C.	T.K. /C.
71	4.00	4.73	5.06	6.20	96	3.86	6.13	5.20	4.80
72	3.86	5.46	4.86	5.26	97	3.20	6.00	4.86	5.93
73	3.26	5.66	5.33	5.73	98	5.20	5.66	5.33	3.80
74	3.46	5.60	5.86	5.06	99	3.00	7.00	4.86	5.13
75	3.40	6.46	5.40	4.73	100	3.66	5.86	5.00	5.46
76	4.80	4.93	5.20	5.06	101	3.53	4.80	6.00	5.66
77	4.26	4.33	5.33	6.06	102	3.73	6.13	5.13	5.00
78	4.20	6.00	5.06	4.73	103	3.73	5.80	5.86	4.60
79	3.80	6.20	4.26	5.73	104	3.60	5.00	6.06	5.33
80	3.93	4.26	4.93	6.86	105	3.40	4.53	6.60	5.46
81	3.80	6.20	4.53	5.46	106	3.53	5.46	4.60	6.40
82	3.13	4.93	6.00	5.93	107	3.06	6.20	4.93	5.80
83	4.20	5.93	4.80	5.00	108	4.53	5.53	4.60	5.33
84	3.40	6.93	5.00	4.66	109	4.13	6.46	4.86	4.53
85	3.86	5.46	5.60	5.06	110	3.93	5.13	4.80	6.13
86	4.26	5.13	5.13	5.46	111	4.00	5.00	4.80	6.20
87	4.53	4.26	5.73	5.46	112	3.60	7.13	4.06	5.20
88	3.60	5.73	4.26	6.40	113	3.86	6.53	4.93	4.66
89	3.33	5.73	4.20	6.73	114	4.20	5.73	4.80	5.26
90	3.33	5.86	5.20	5.60	115	4.13	6.26	4.93	4.66
81	3.40	5.60	5.33	5.66	116	3.93	5.33	4.20	6.53
92	3.86	4.60	5.46	5.93	117	3.53	4.86	5.20	6.40
93	3.26	5.26	5.33	6.13	118	3.93	6.00	5.33	4.73
94	3.86	6.53	5.13	4.46	119	3.66	6.26	5.00	5.06
95	3.66	5.13	5.13	6.06	120	3.20	5.60	5.60	5.60